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International Bureau



(43) International Publication Date
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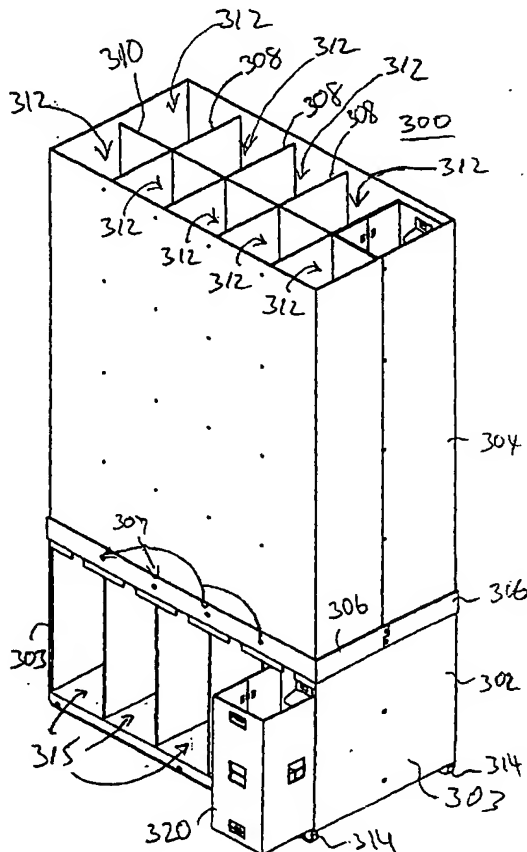
(10) International Publication Number
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PCT

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- (22) **International Filing Date:** 13 June 2003 (13.06.2003)
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- (71) **Applicants and**
- (72) **Inventors:** CHIRNOMAS, Munroe [US/US]; 47 Skyline Drive, Morris Township, NJ 07960 (US). GEIGERICH, David, k. [US/US]; 540 Westwood AveNUE, River Vale, NJ 07675 (US). Leski, Raymond, B. [US/US]; 1082 June Court, Toms River, NJ 08753 (US).
- (74) **Agent:** EDELMAN, Lawrence; Fastcorp, One Cory Road, Morris Township, NJ 07960 (US).
- (81) **Designated States (national):** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) **Designated States (regional):** ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report

[Continued on next page]

(54) Title: ARTICLE STORAGE MAGAZINE FOR AN ARTICLE HANDLING DEVICE



(57) Abstract: An article handling apparatus having an article storage area (215) includes a movable storage structure (219). The movable storage structure (219) has a bin segment guidance structure to form a plurality of axially aligned article storage columns (216). The guidance structure includes a receiving device providing individual coupling to article storage bin segments (1202) so as to allow grouping of bin segments into the plurality of aligned article storage columns.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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FIG. 1

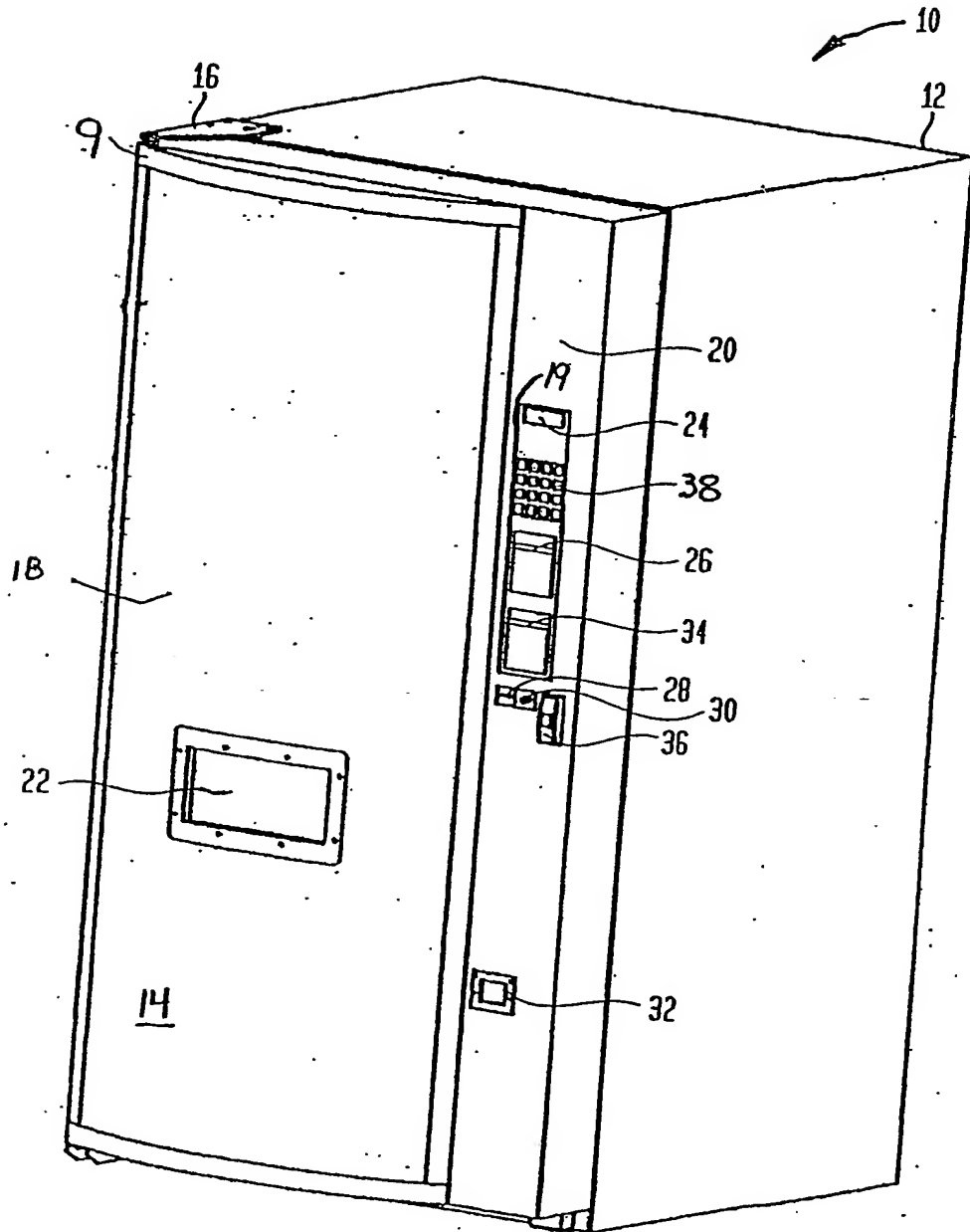


FIG. 2

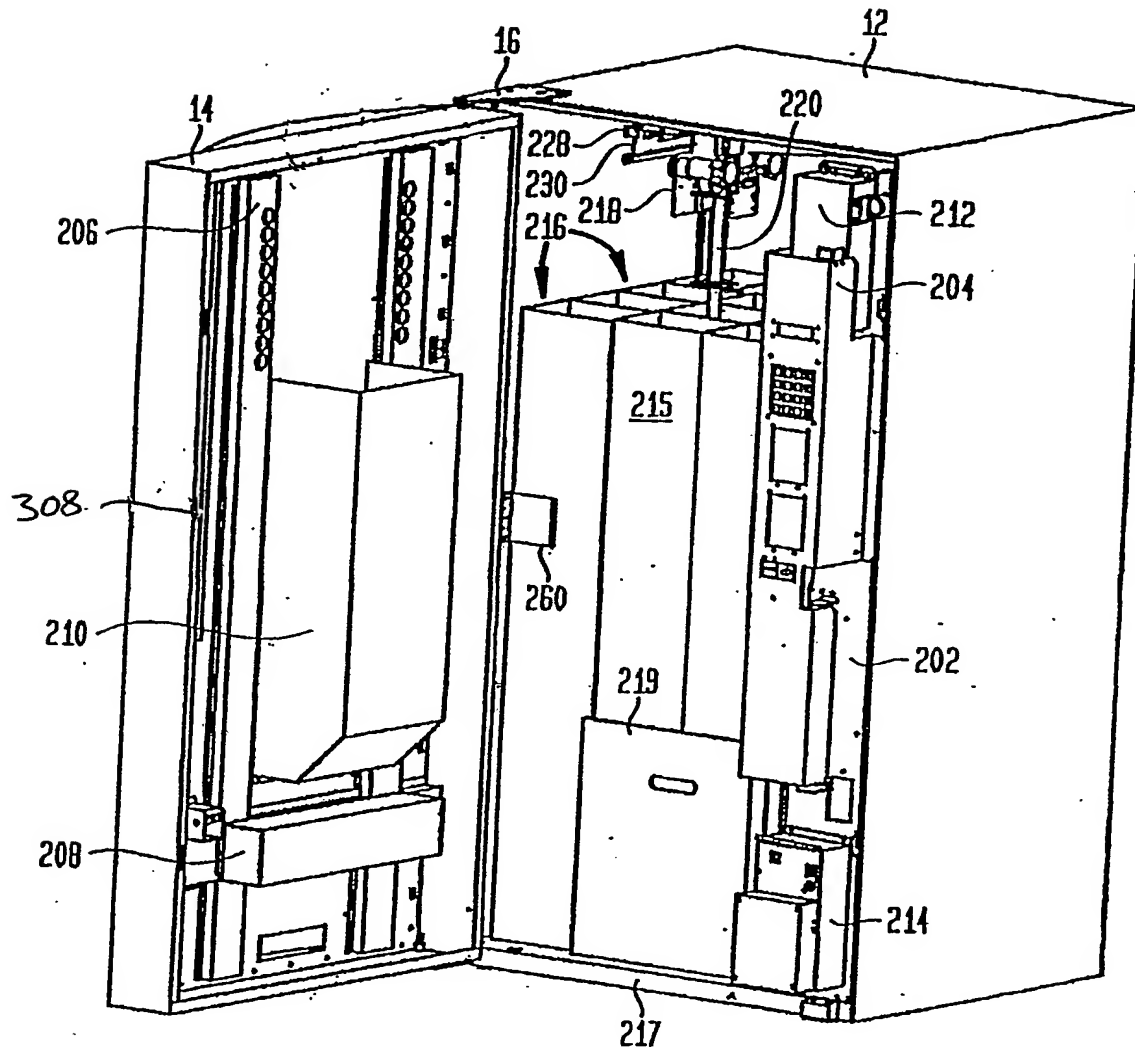


FIG. 3

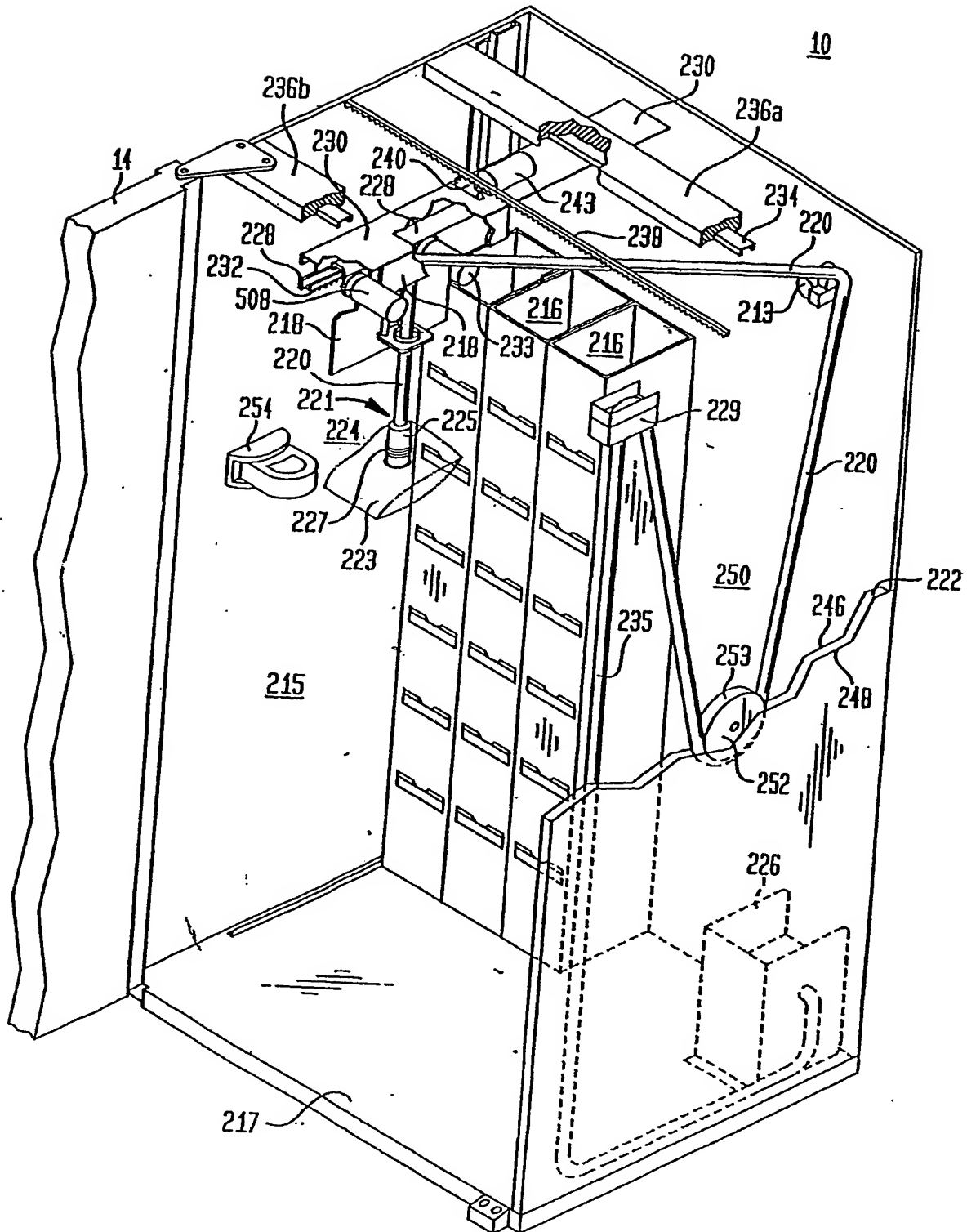


FIG. 4A

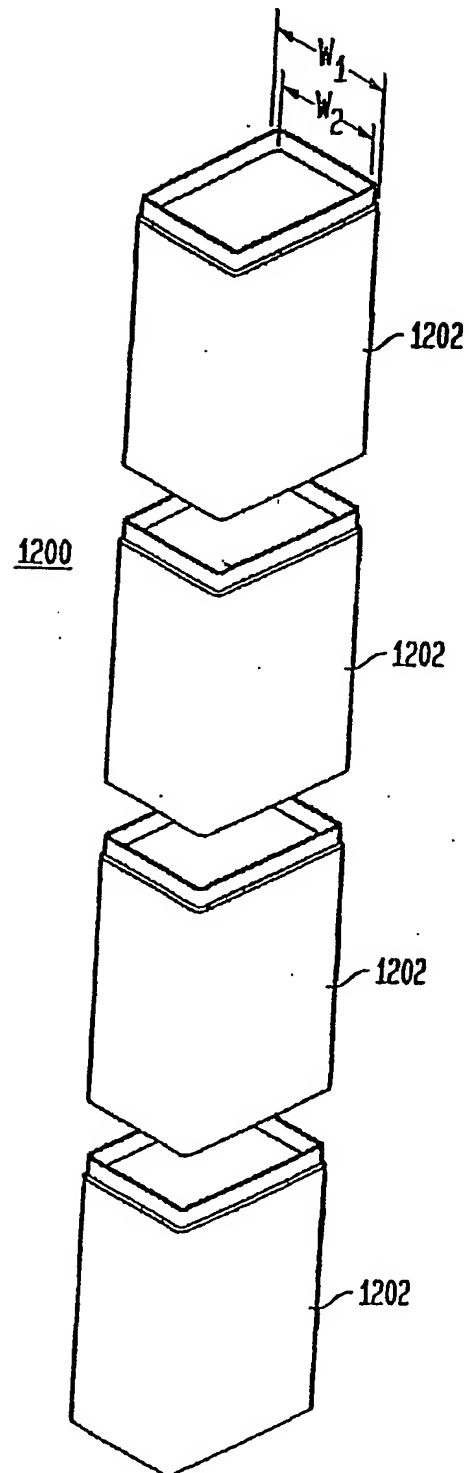


FIG. 4B

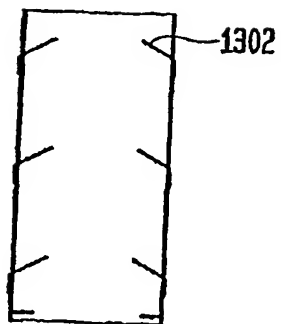
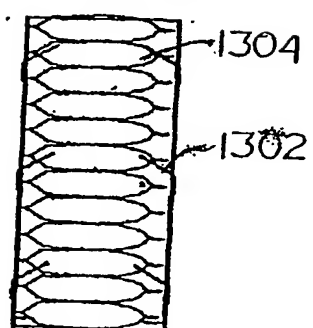


FIG. 4C



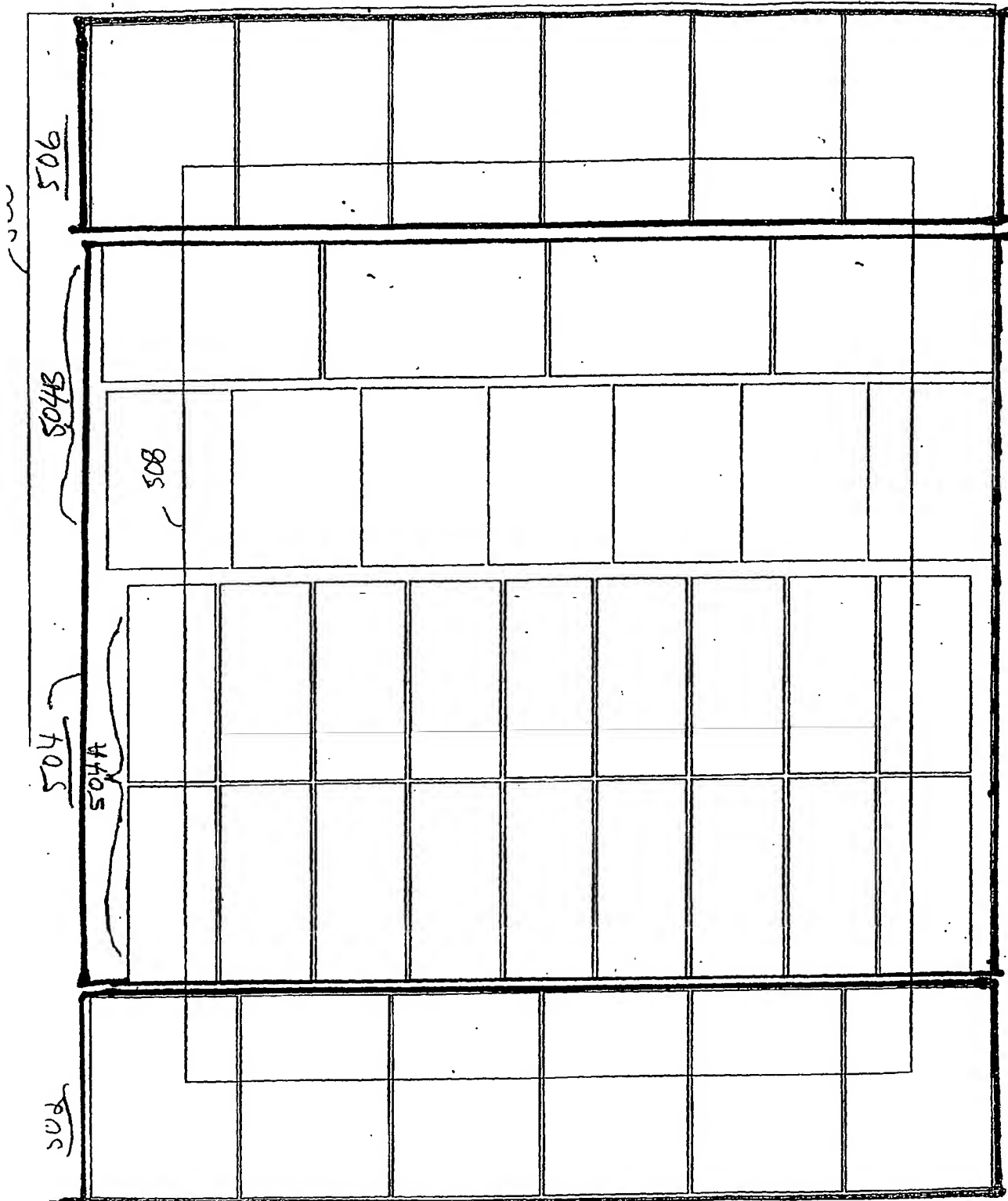


FIG 5

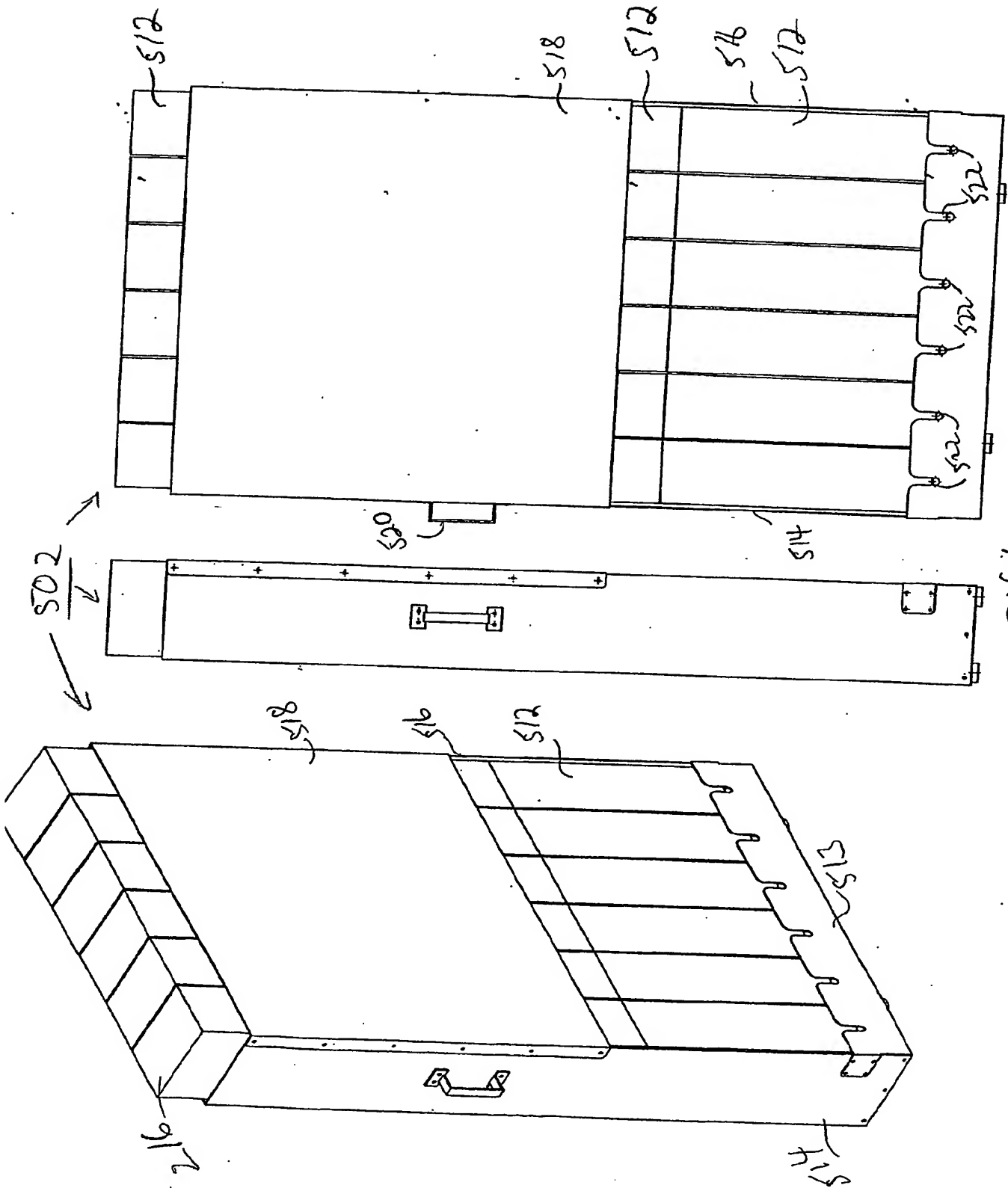


FIG. 6

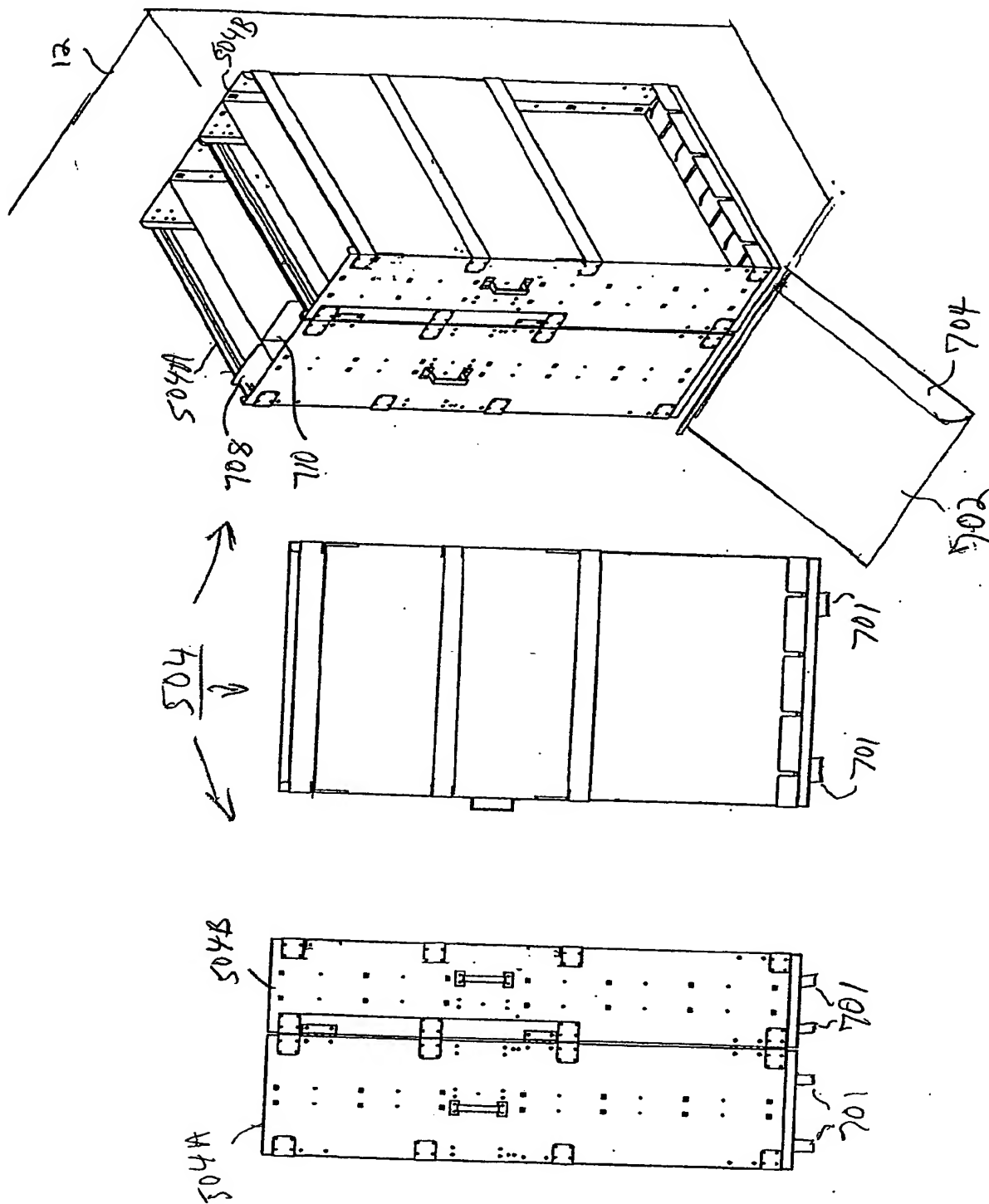


FIG. 7A

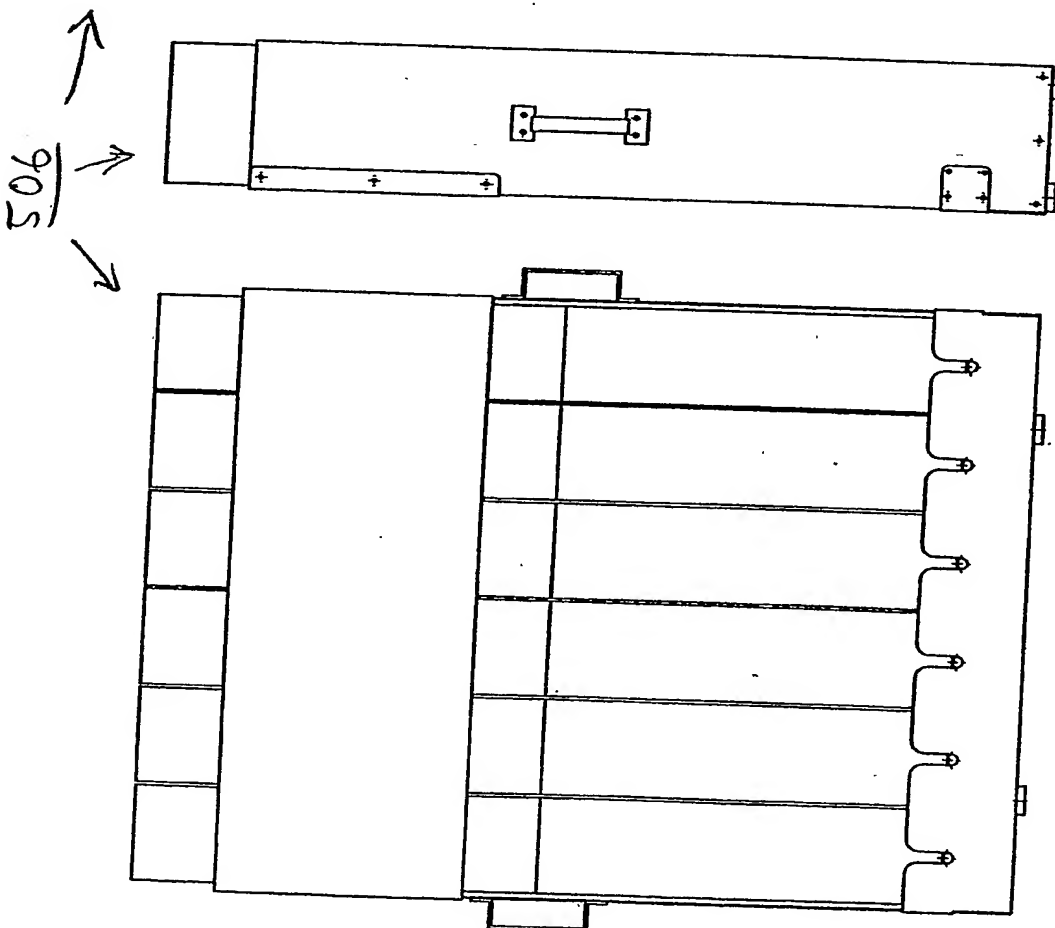
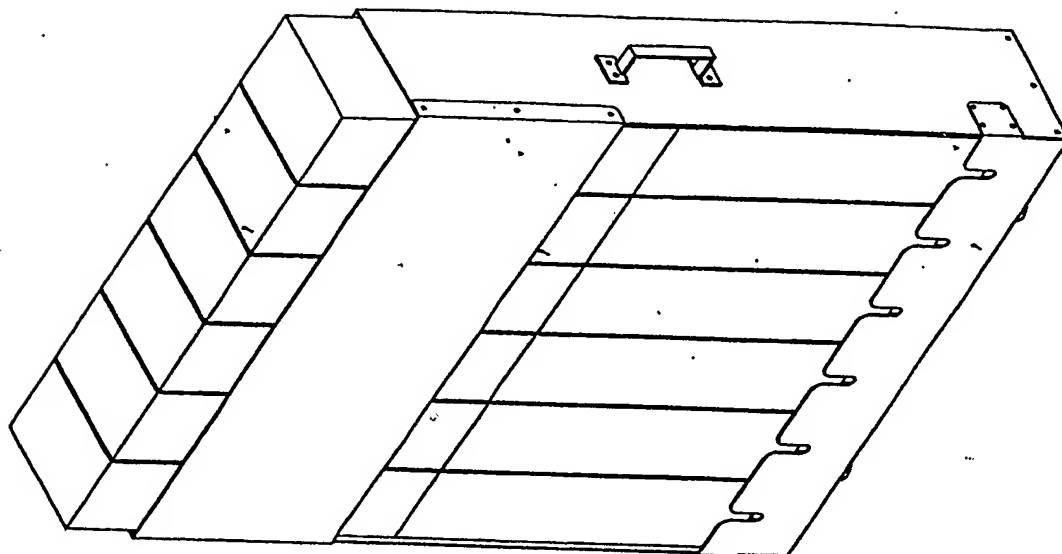


FIG. 8

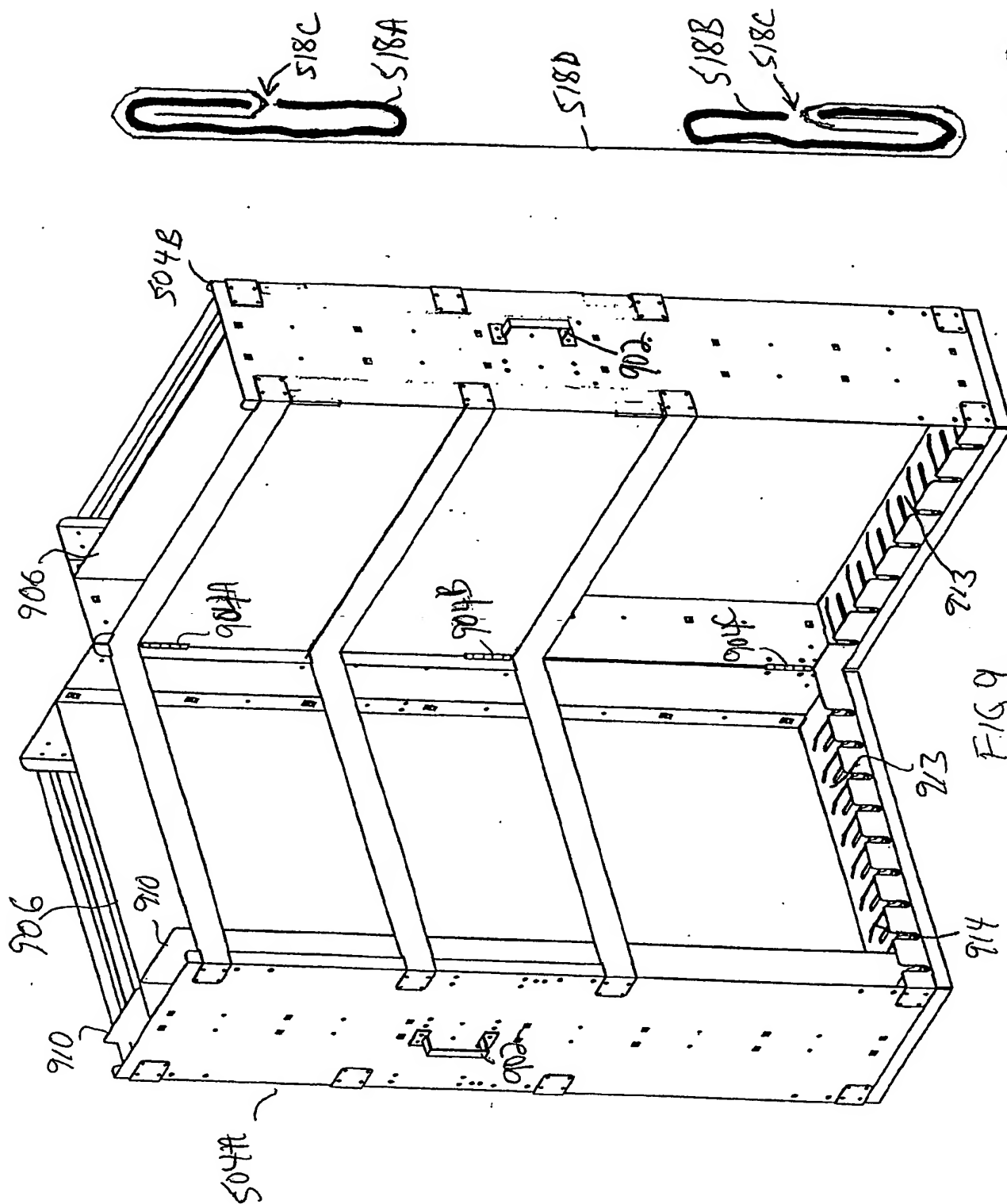


FIG 7B

FIG 9

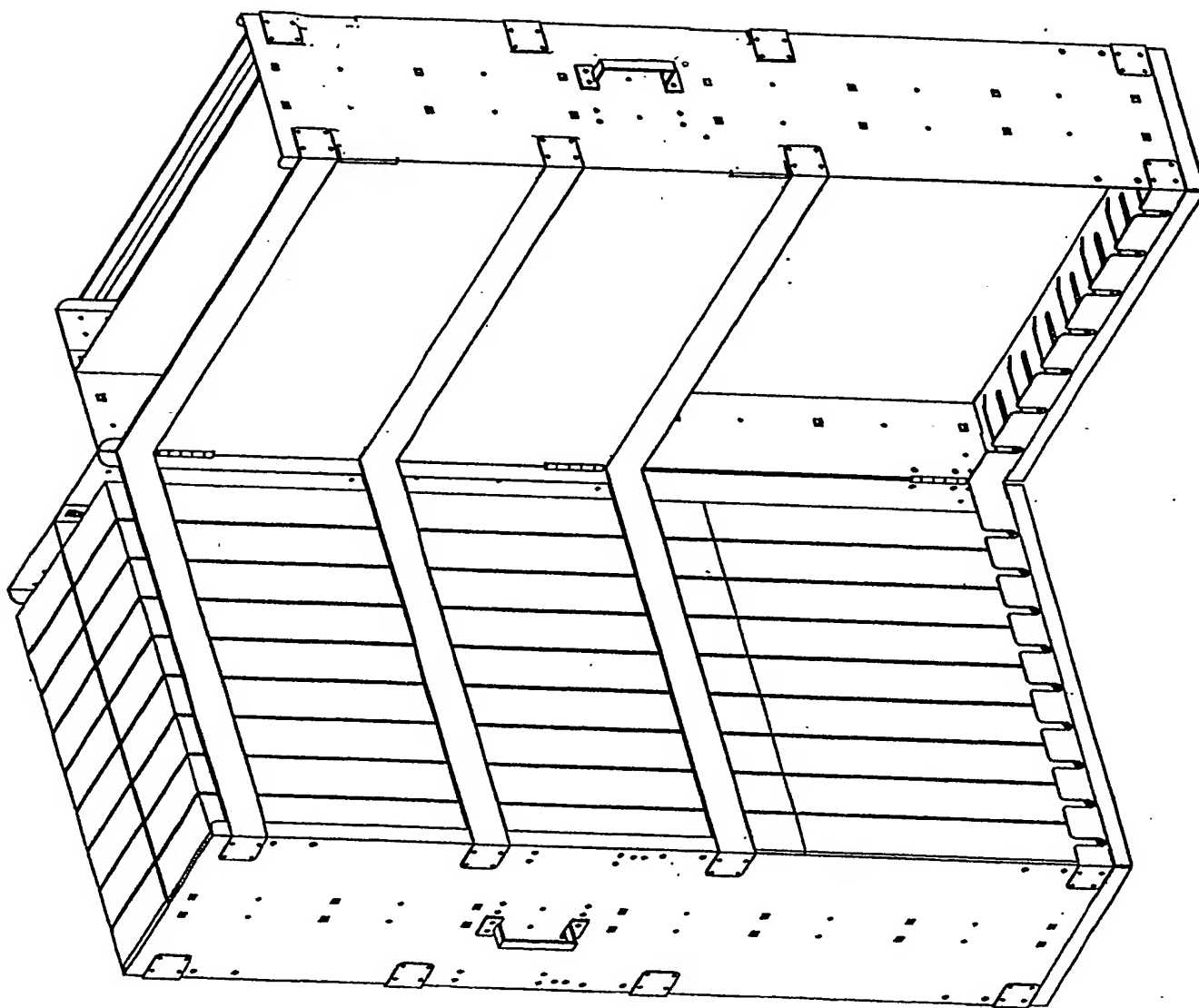


FIG. 10



FIG 11

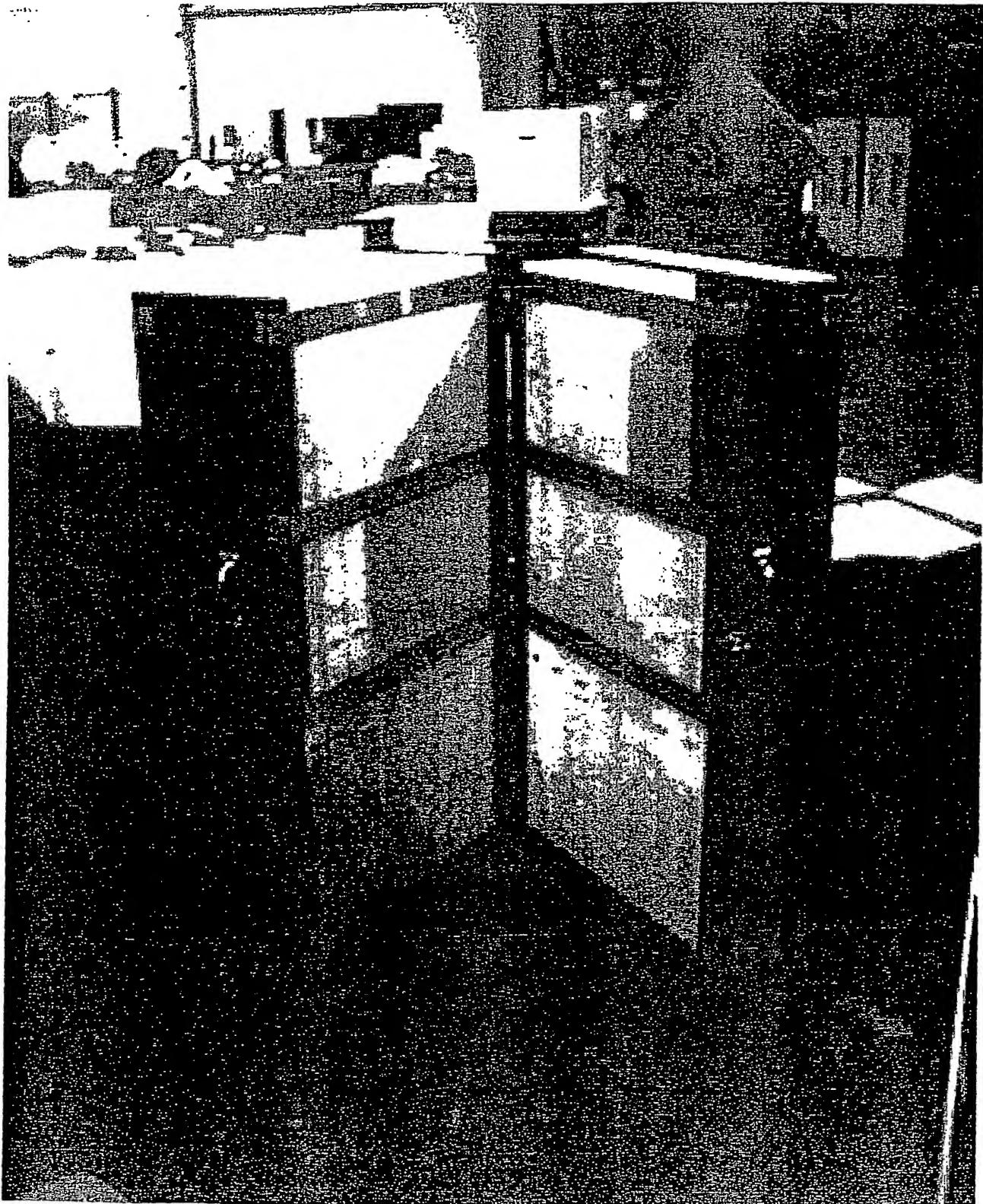


FIG. 12

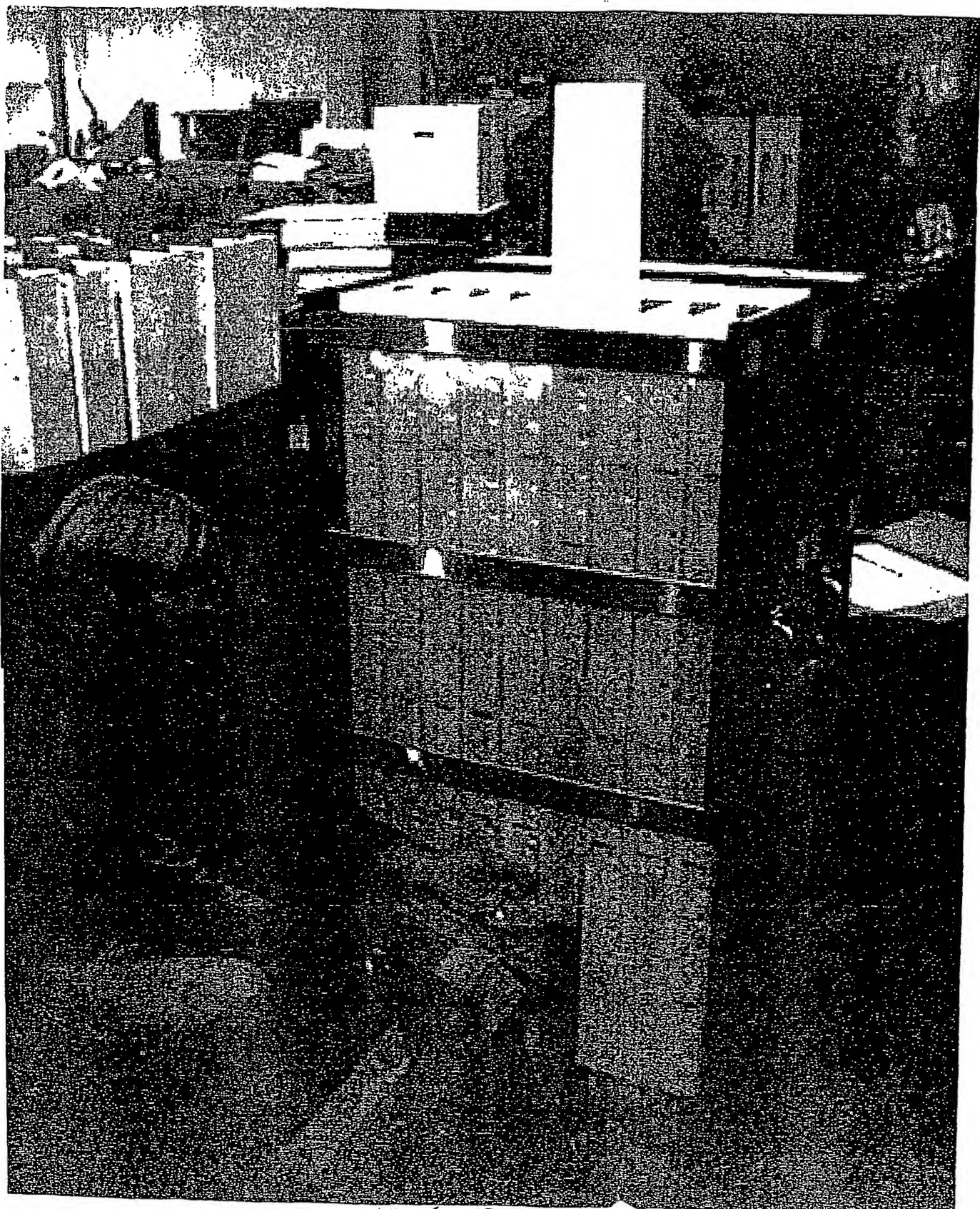


FIG 13

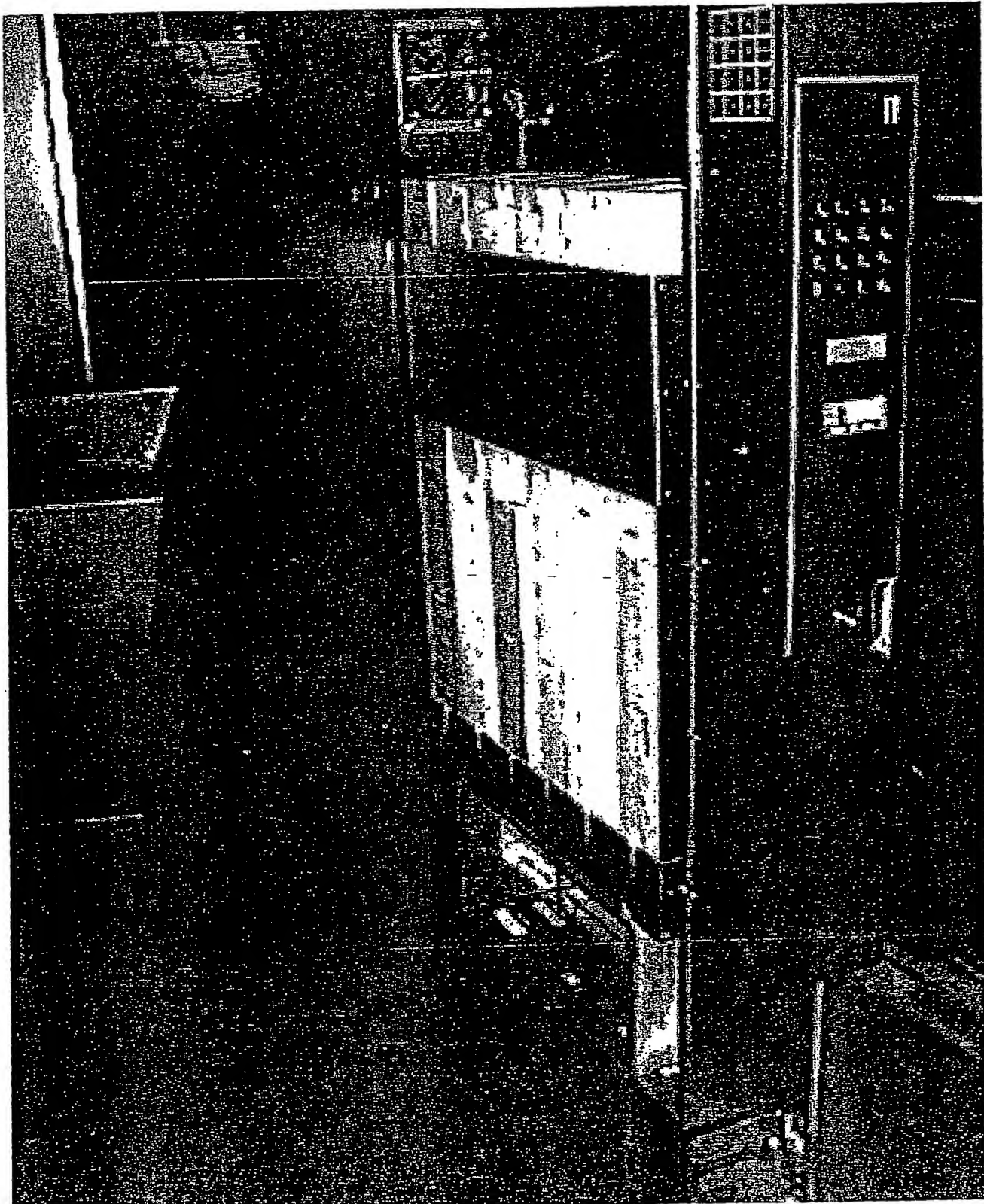


FIG 14

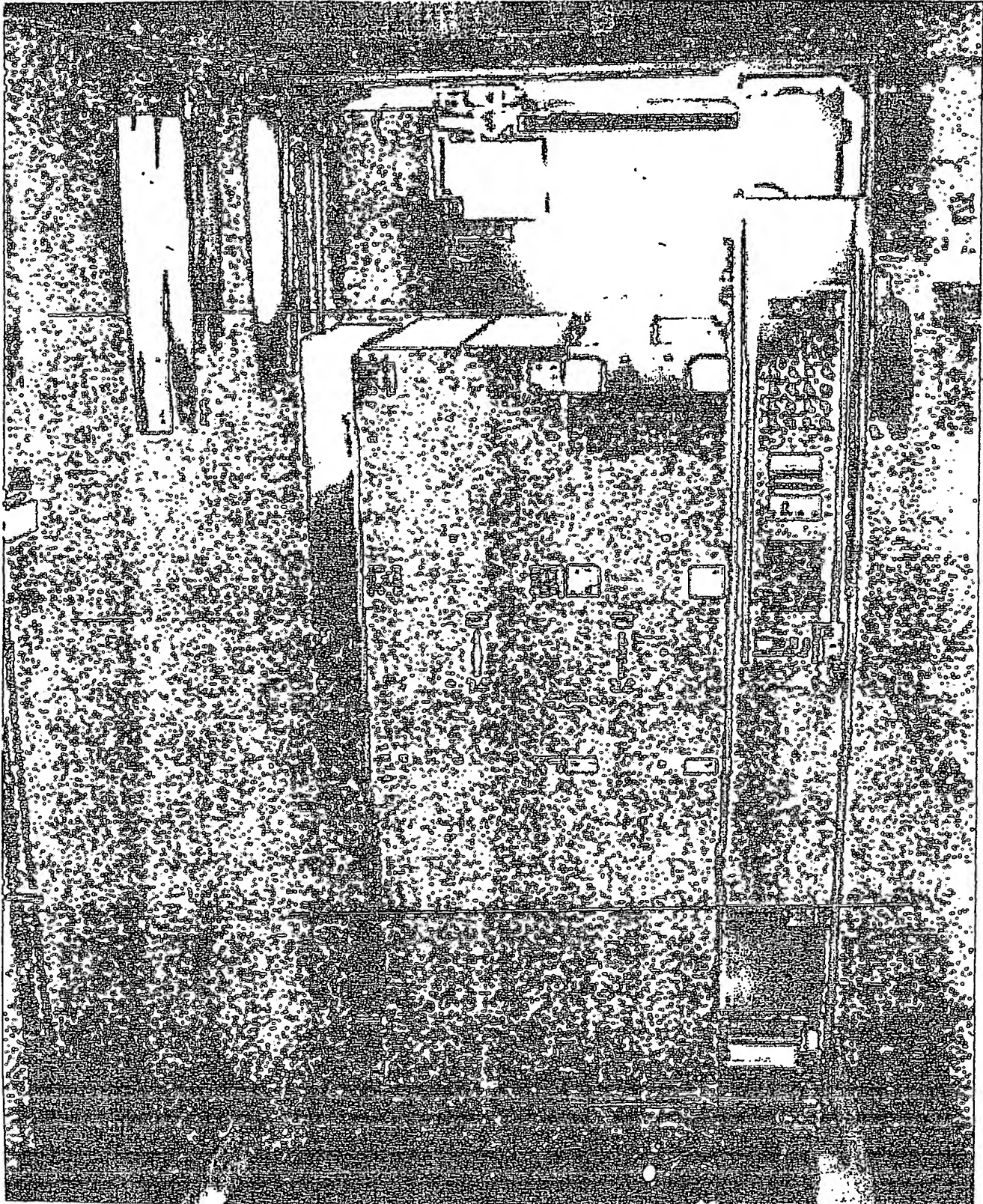


FIG. 15

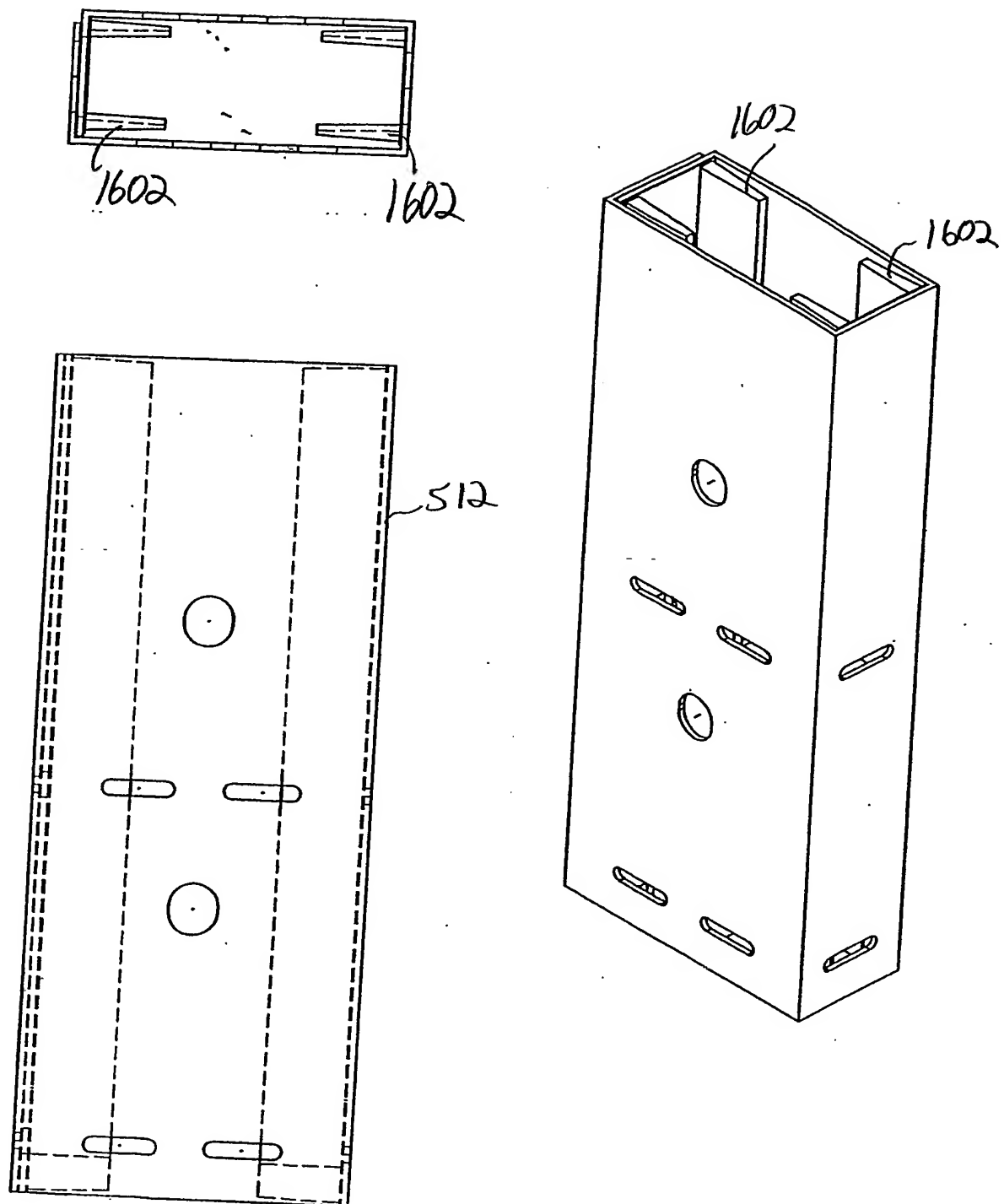


FIG 16

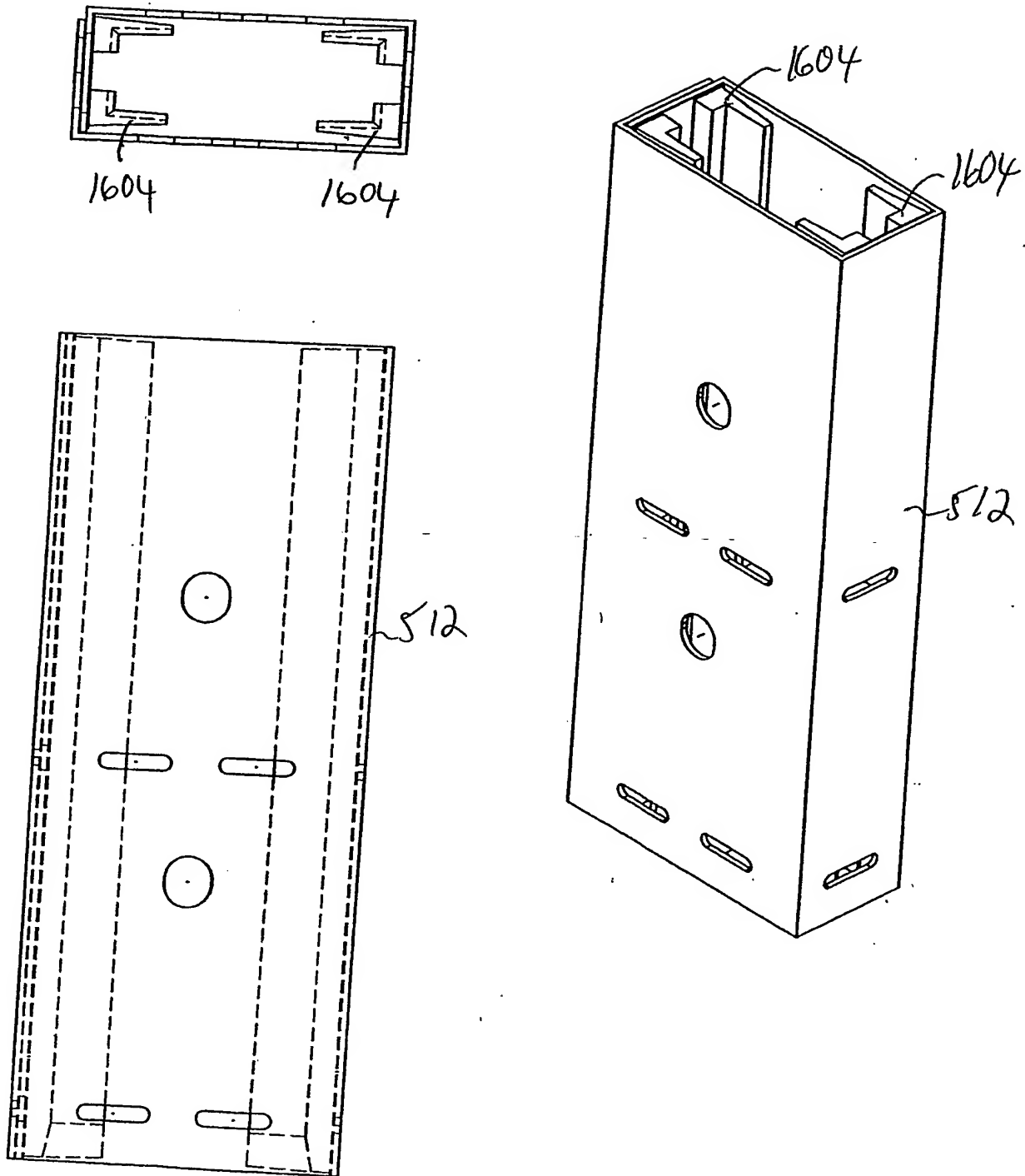
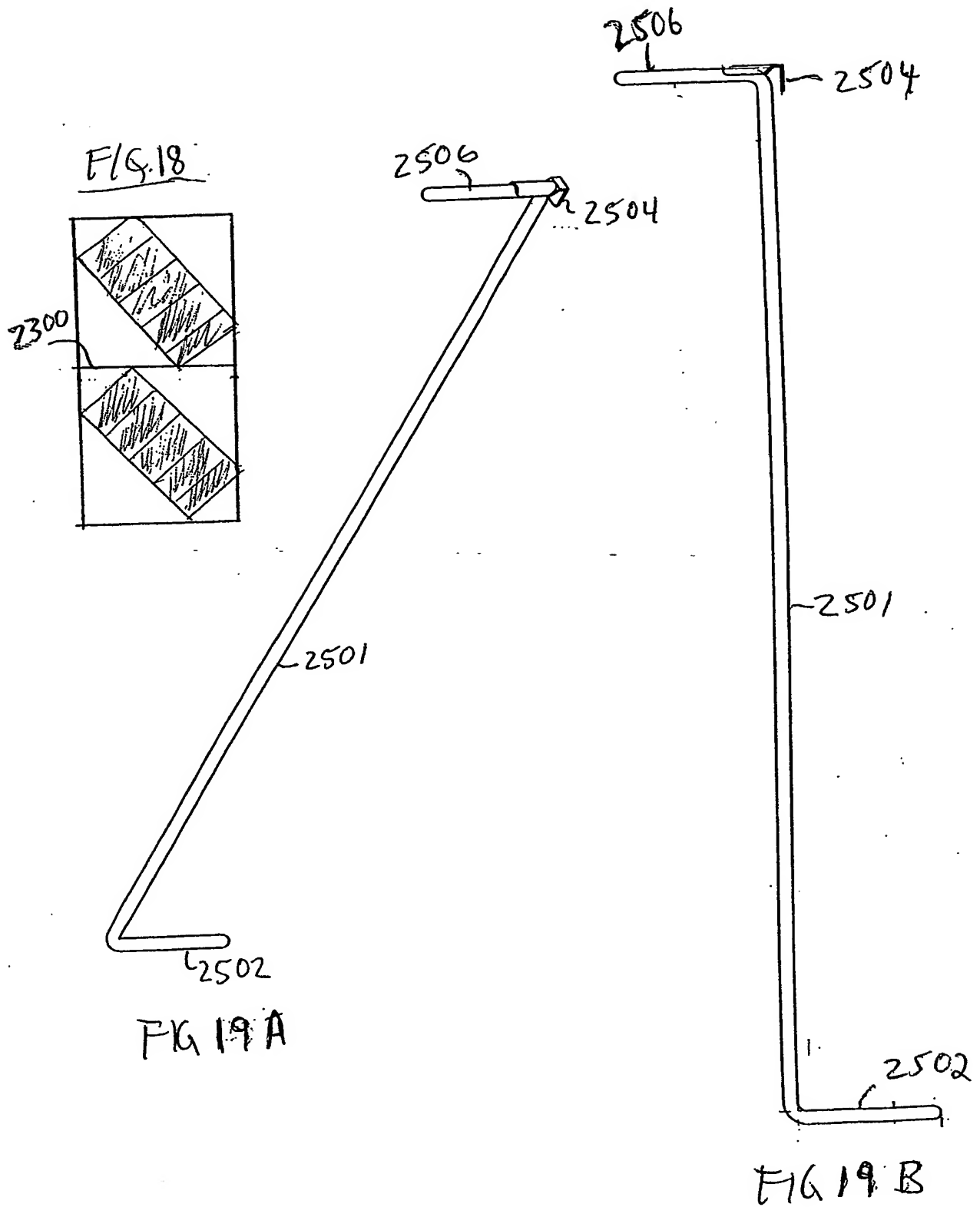


FIG 17



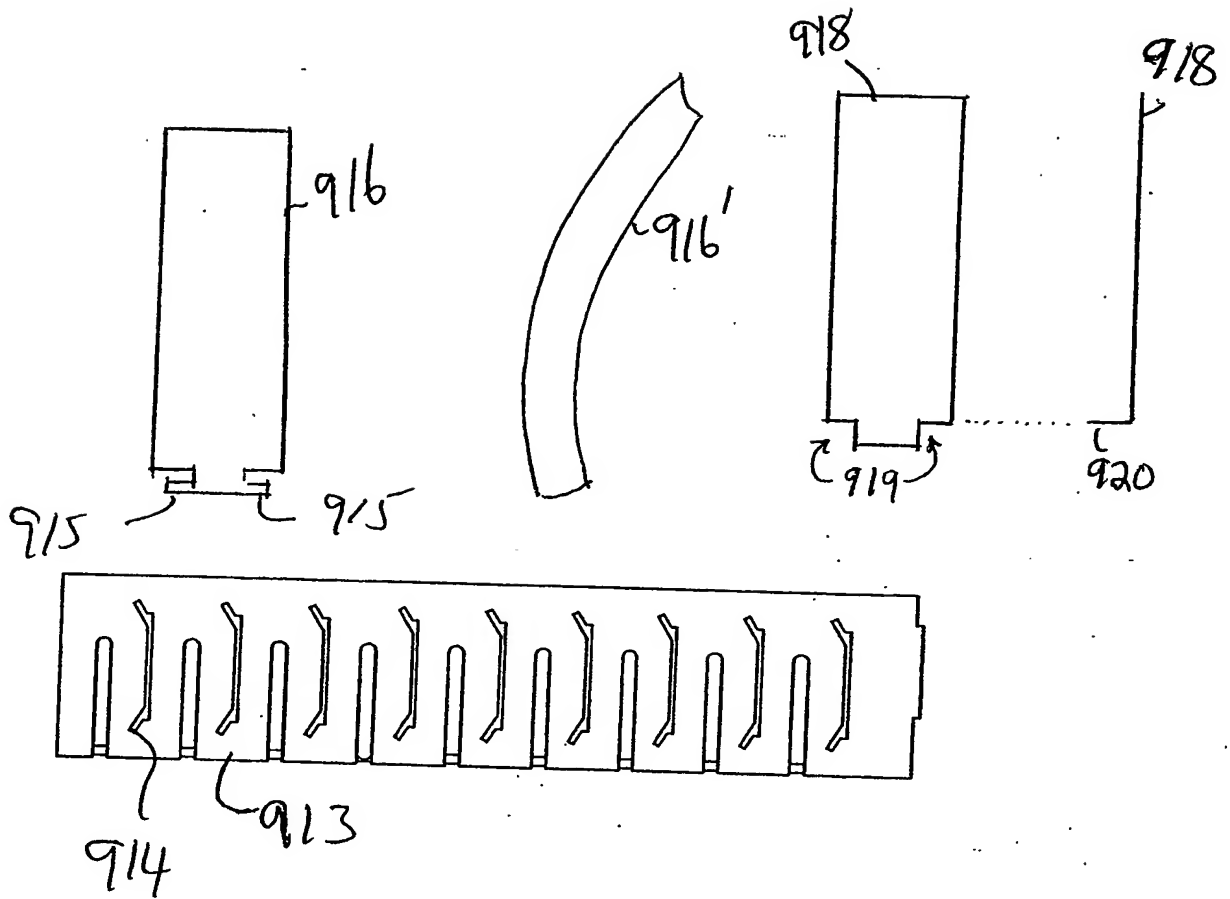


FIG. 20A

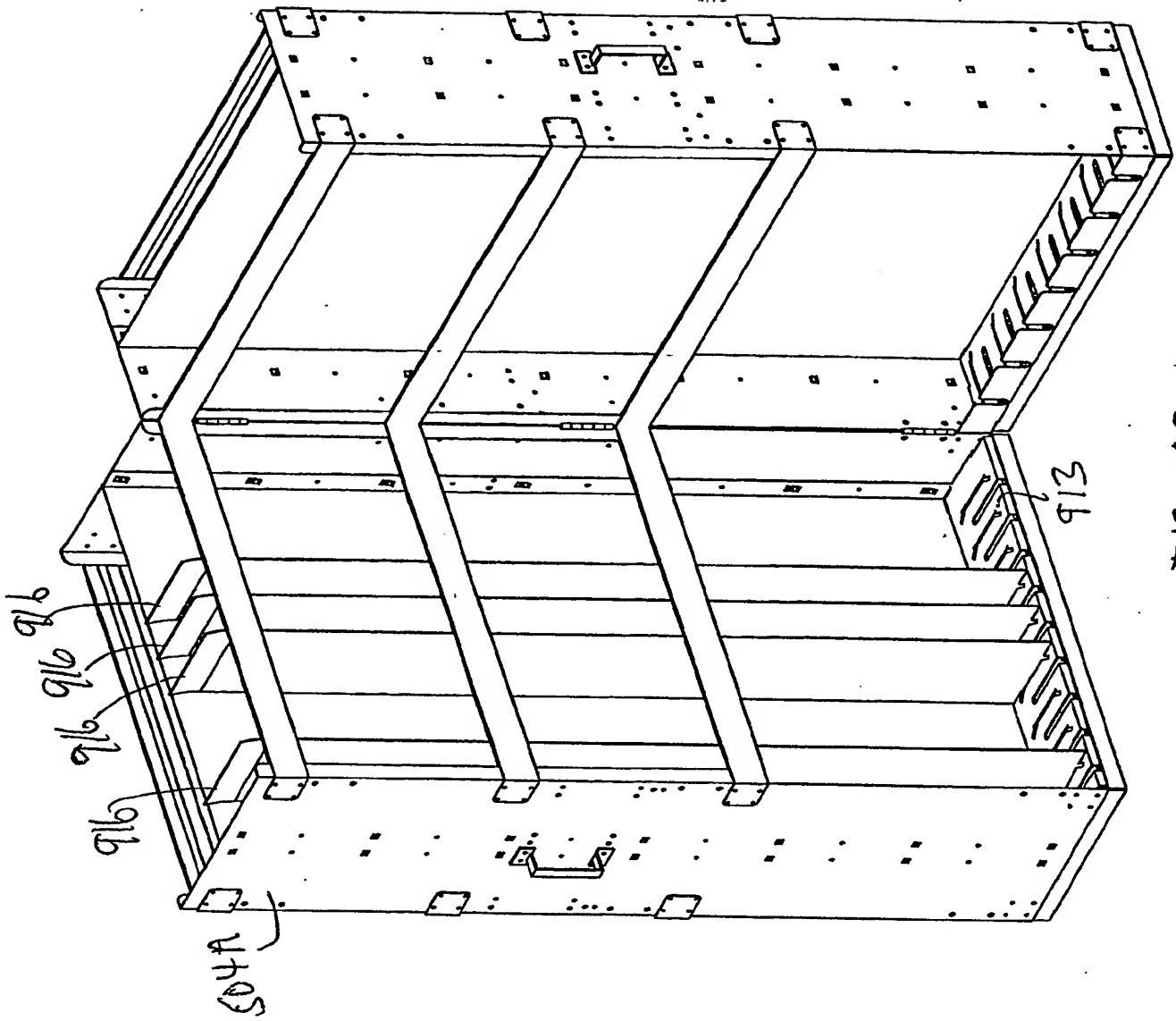


FIG 20B

FIG. 2/a

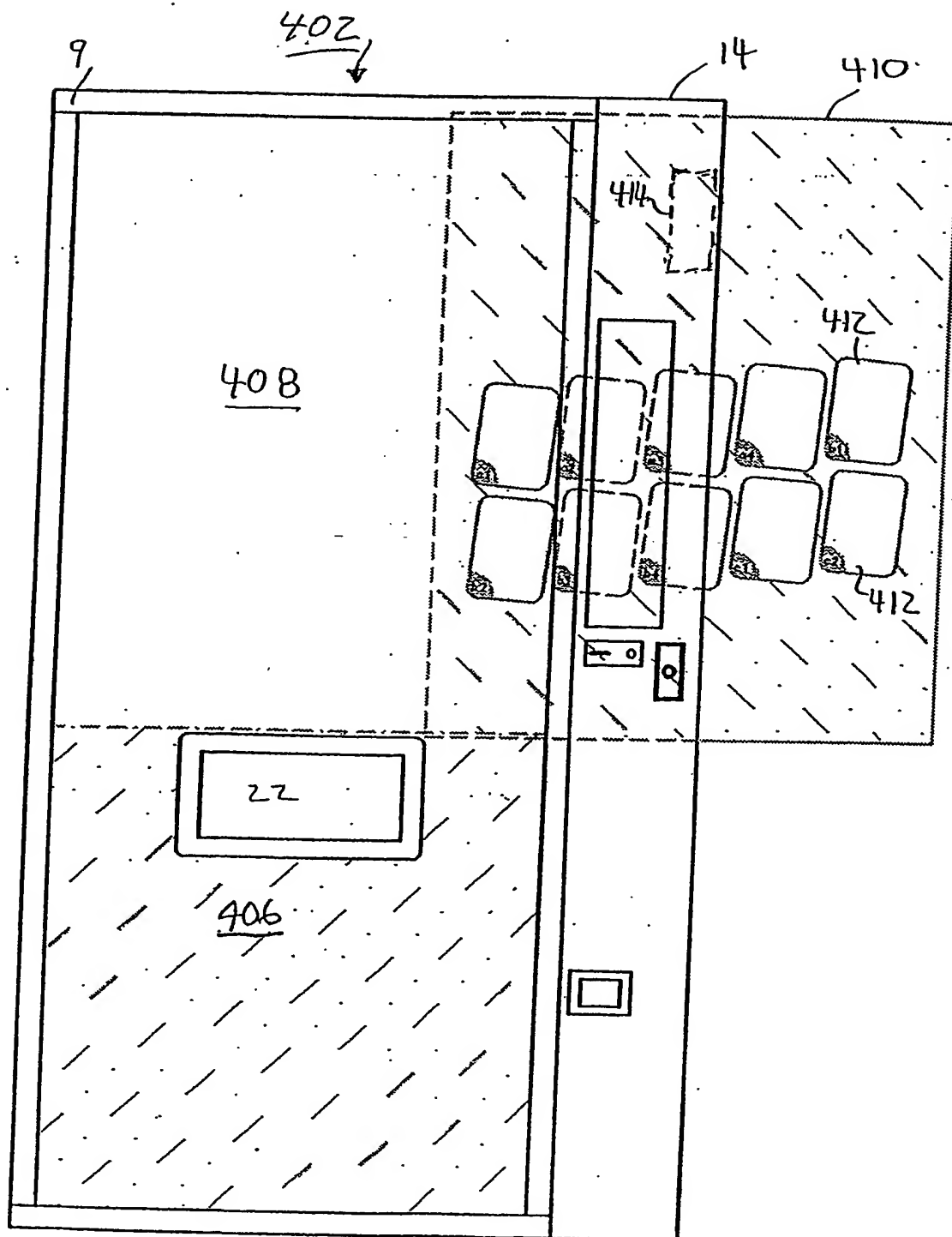
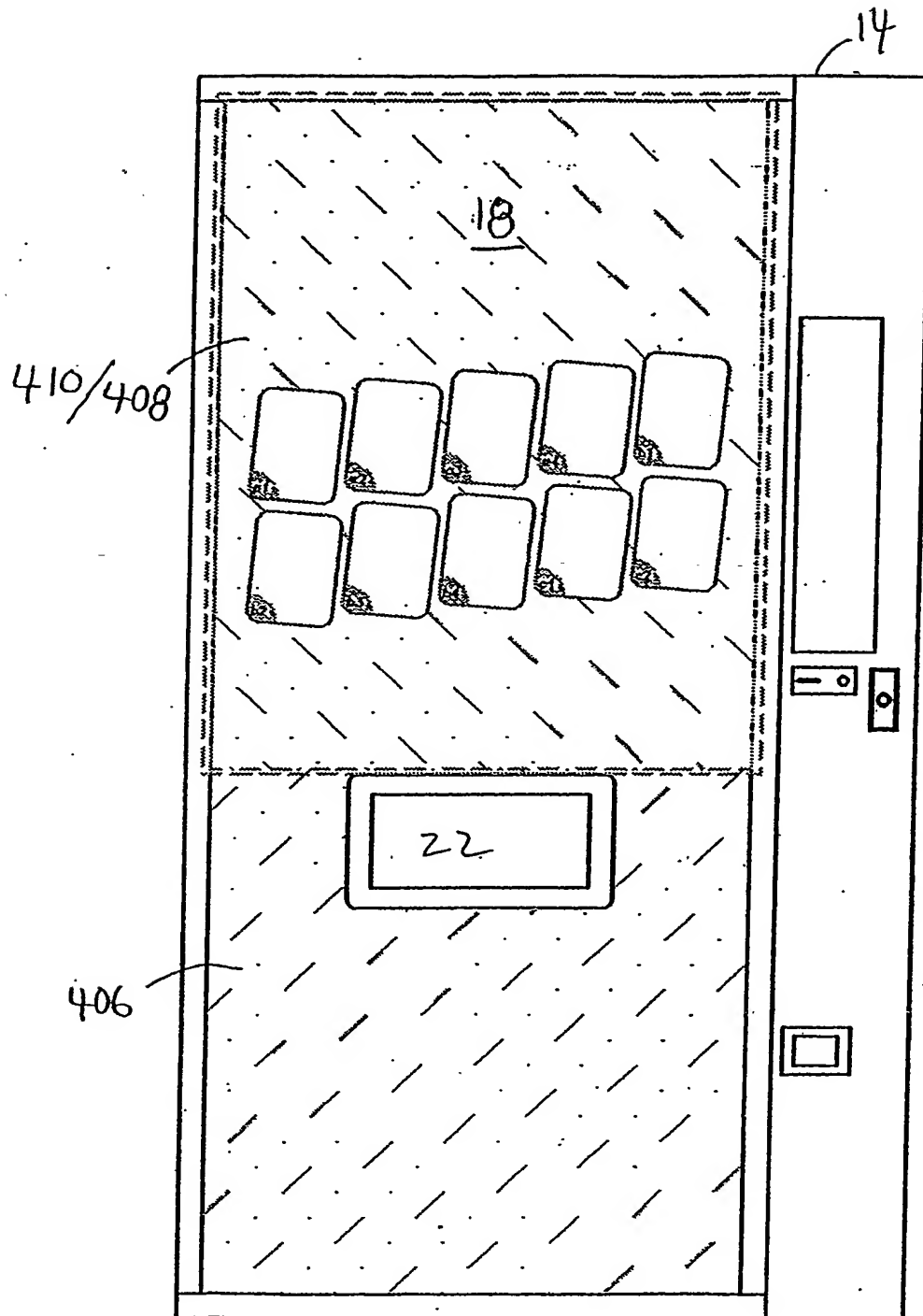
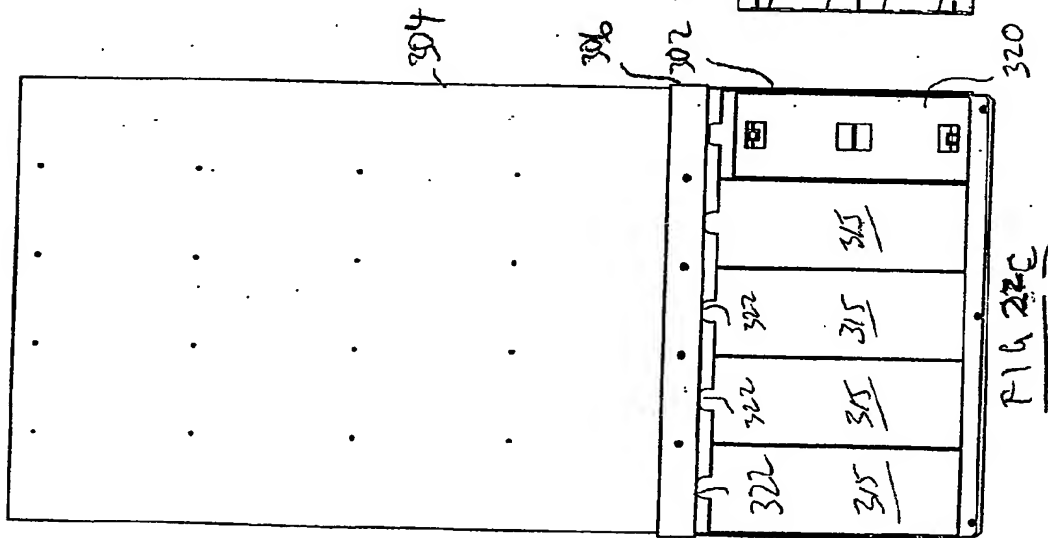
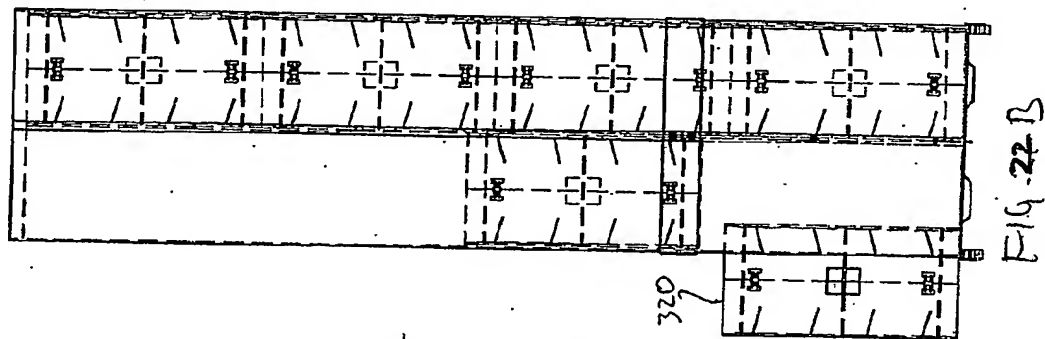
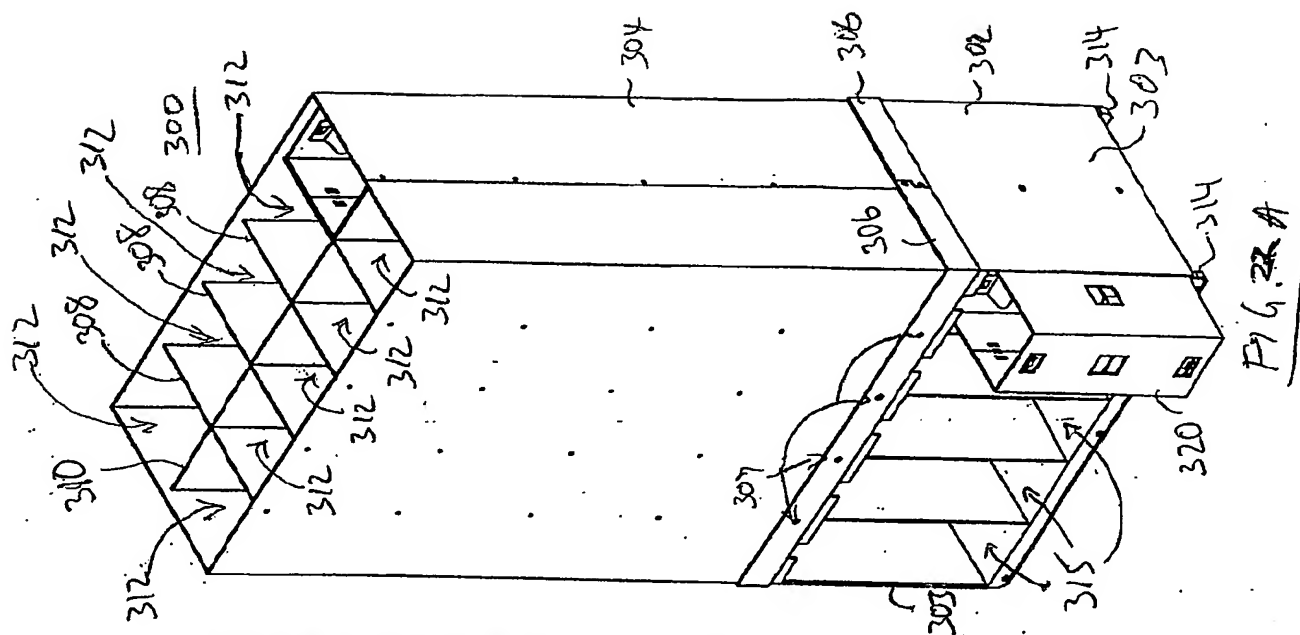


FIG.2|b





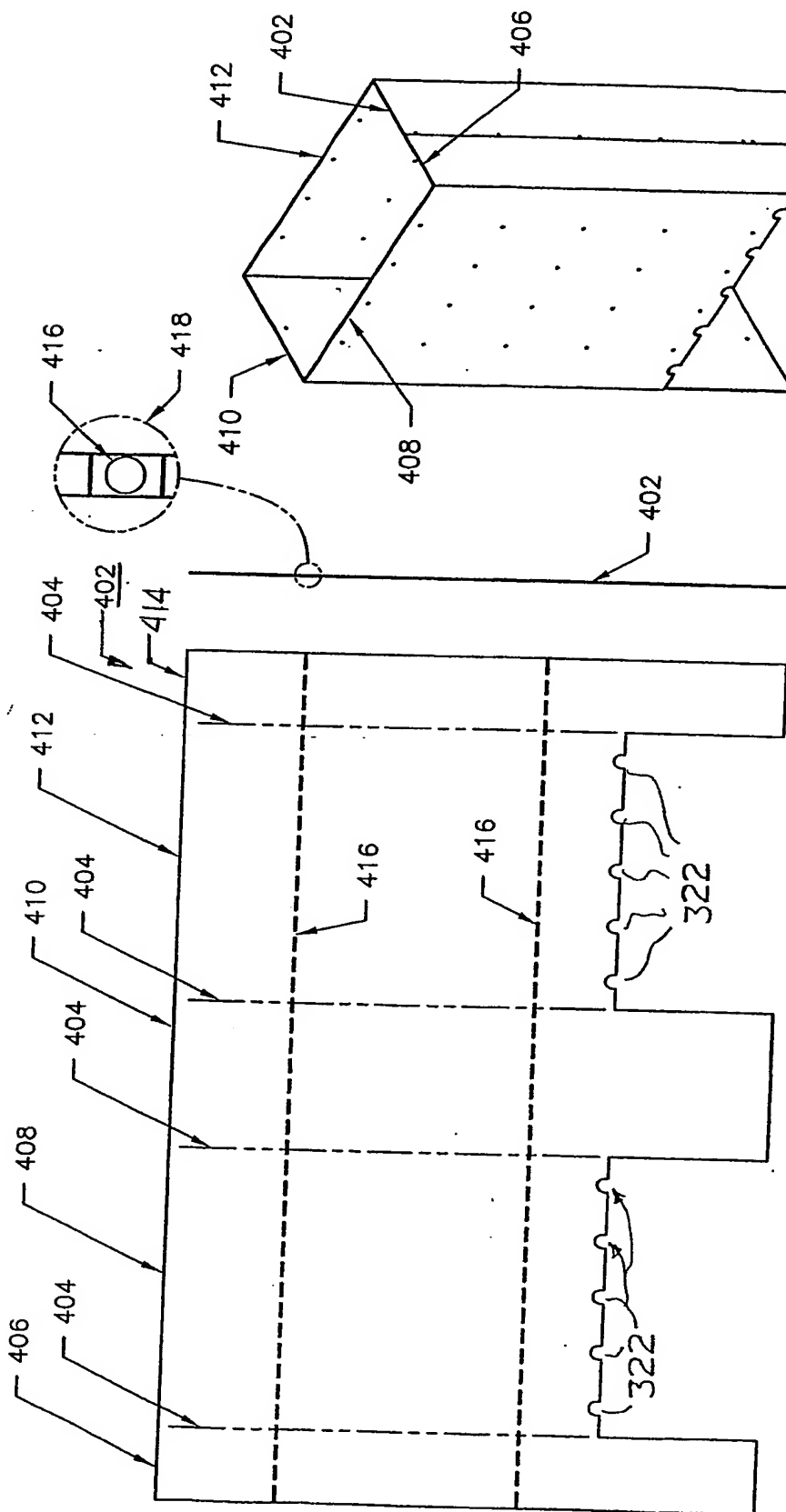


FIG. 23B

FIG. 23A

FIG. 23C

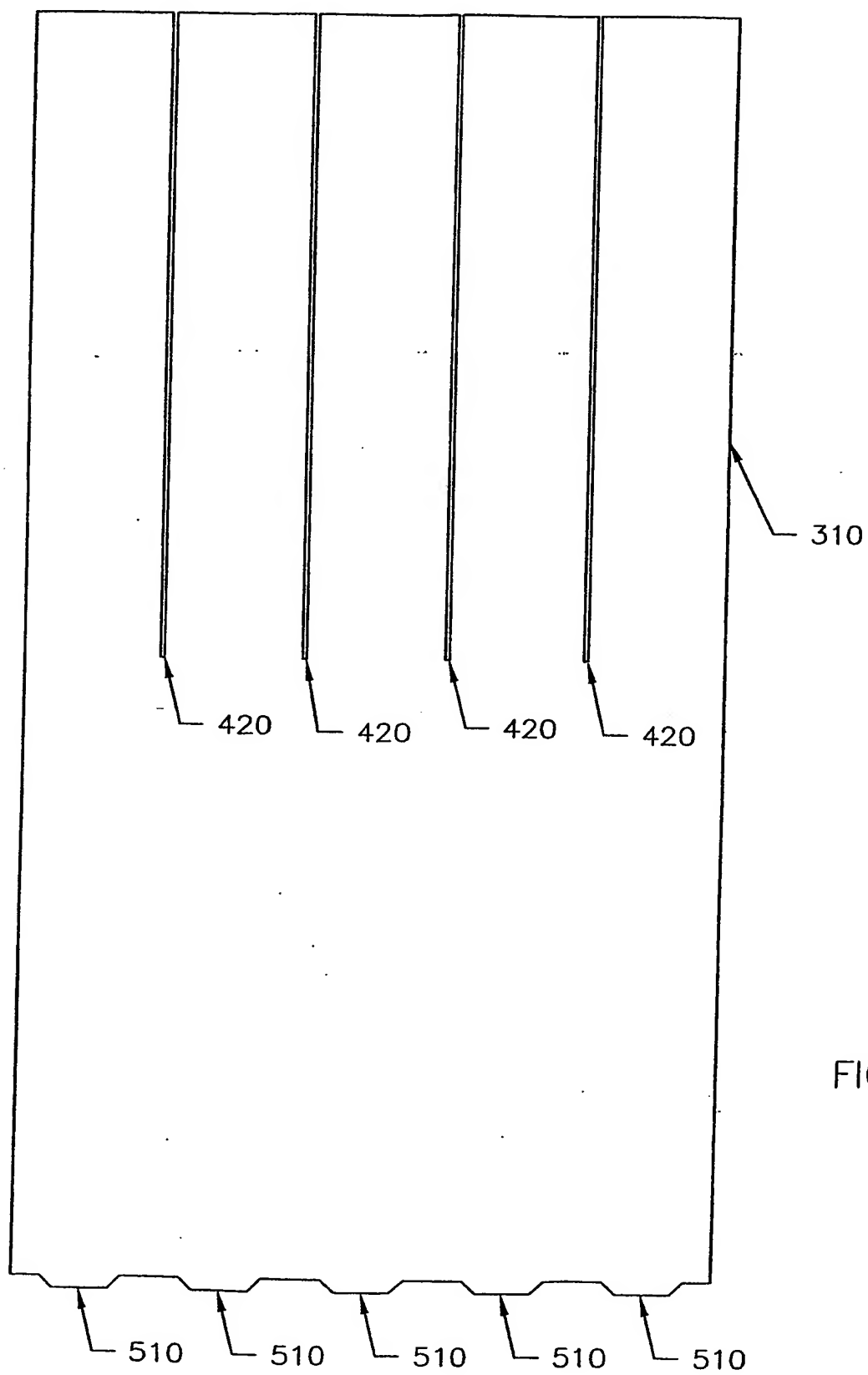


FIG. 23D

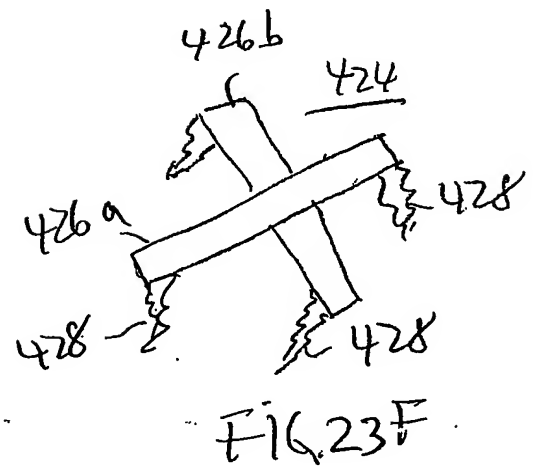
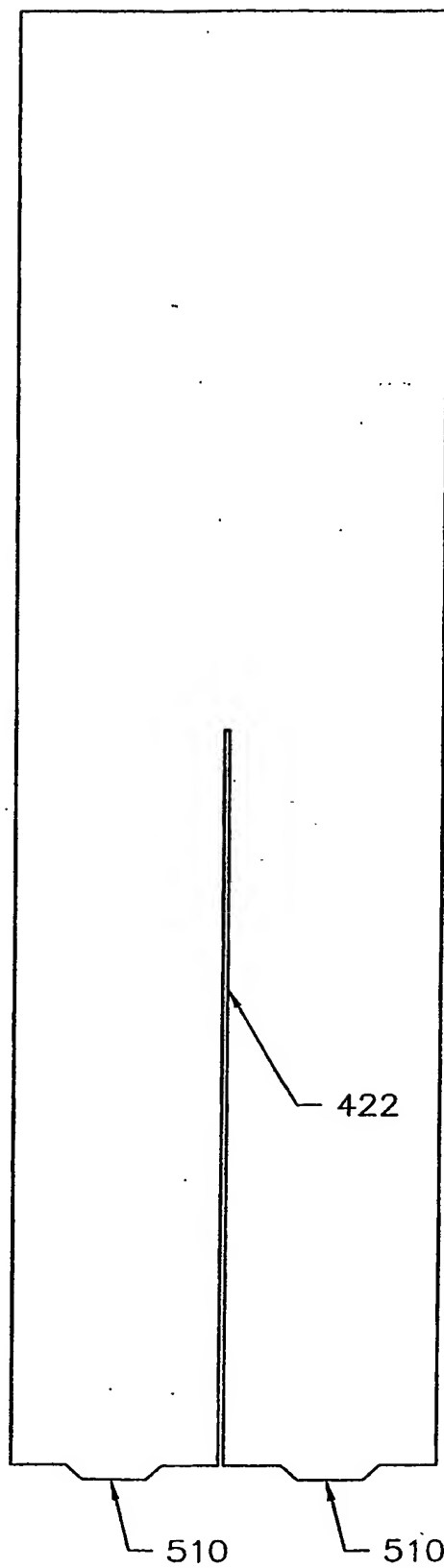


FIG. 23E

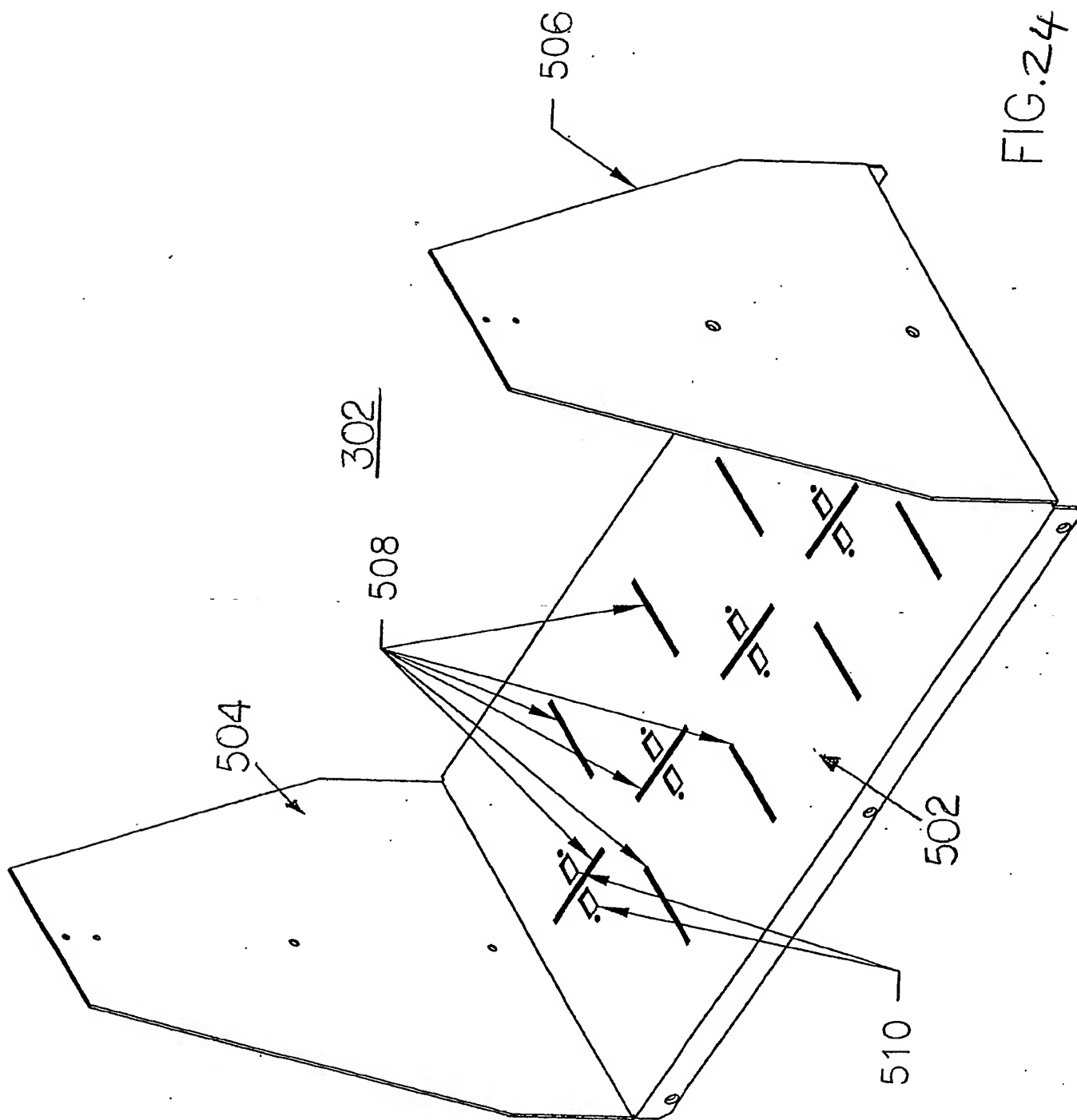


FIG. 25A

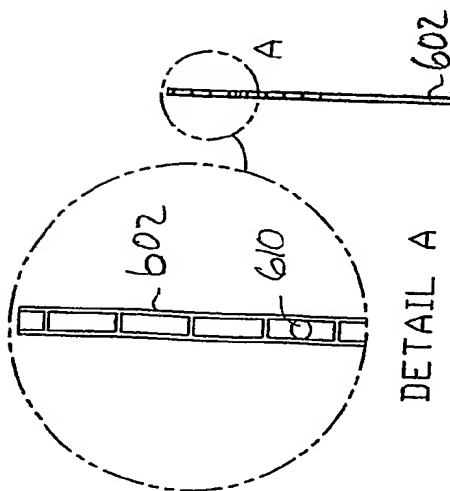
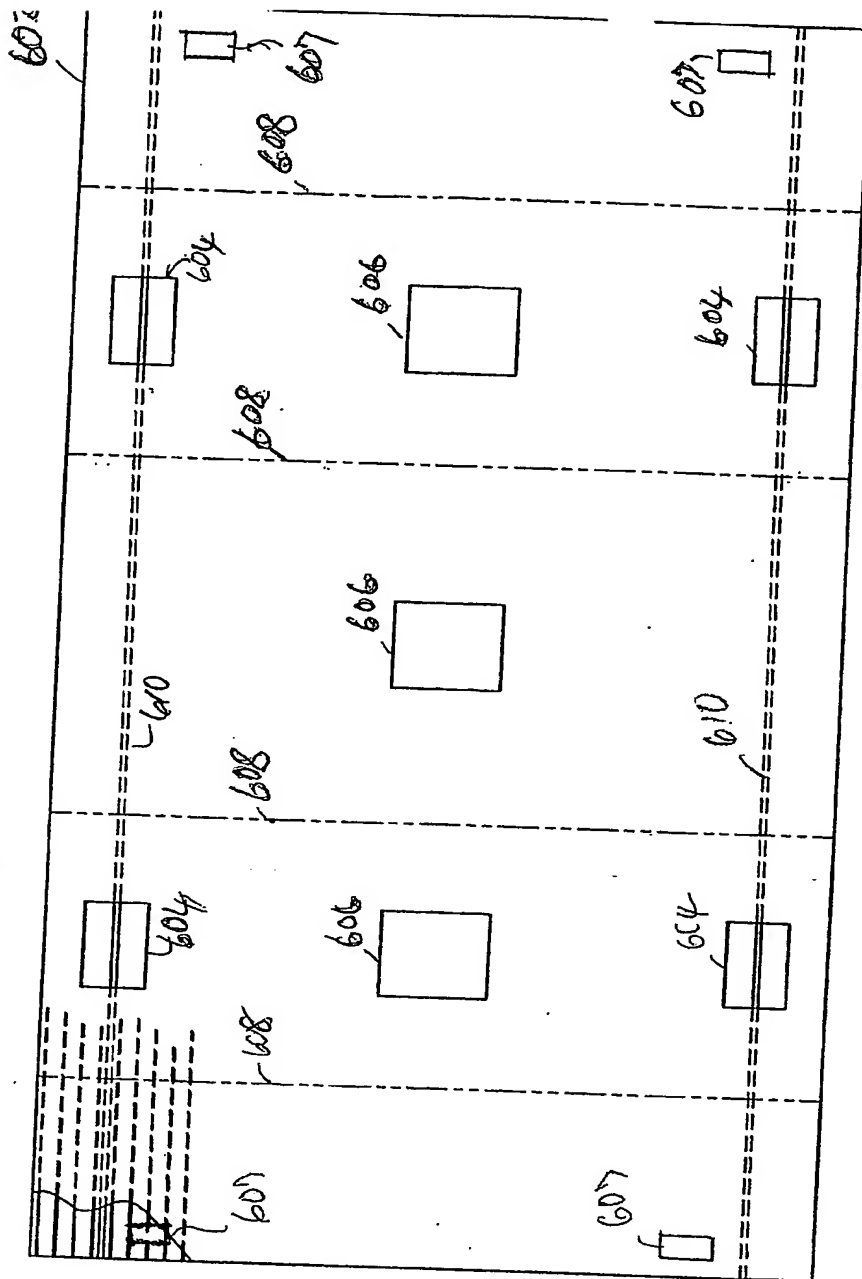
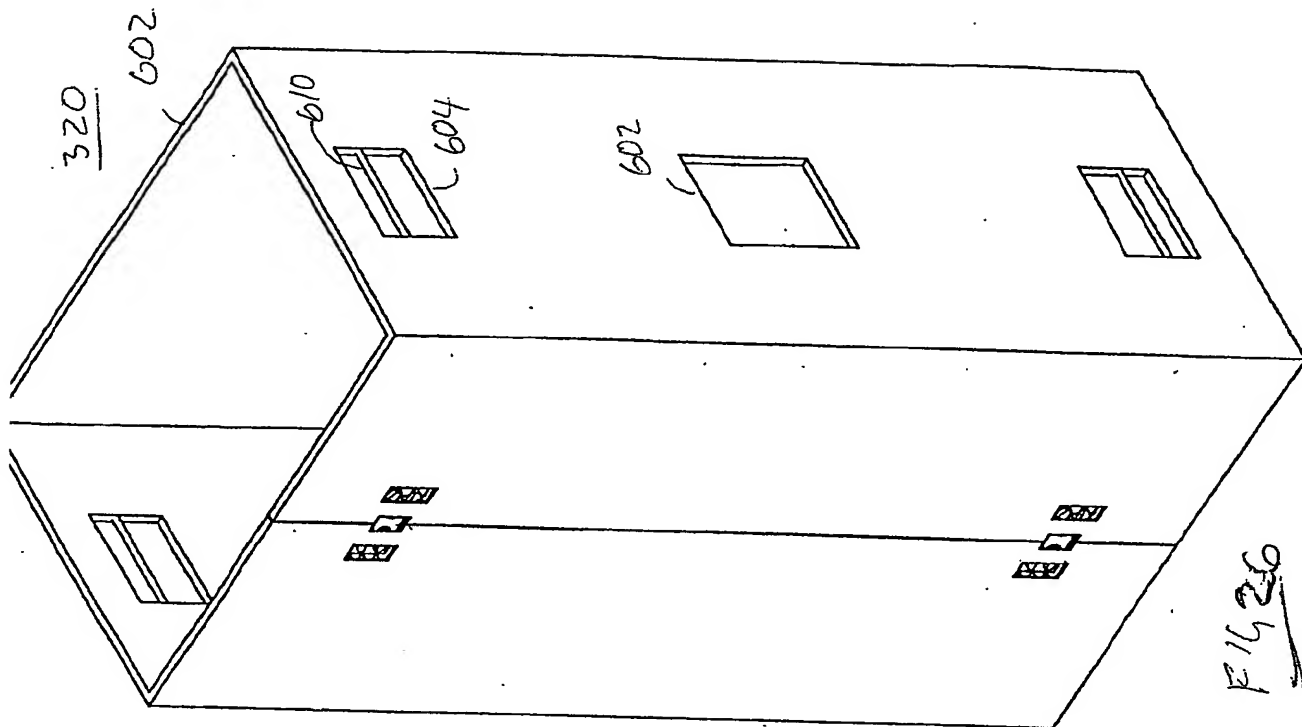
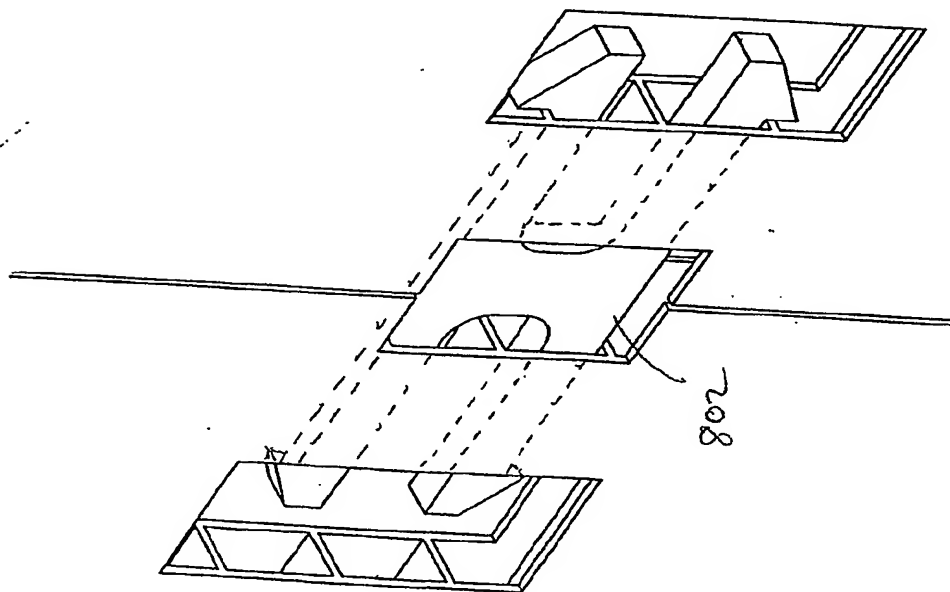


FIG. 25B

DETAIL A



ASSY, PRODUCT COMPARTMENT
A.C.S. 5-6-02



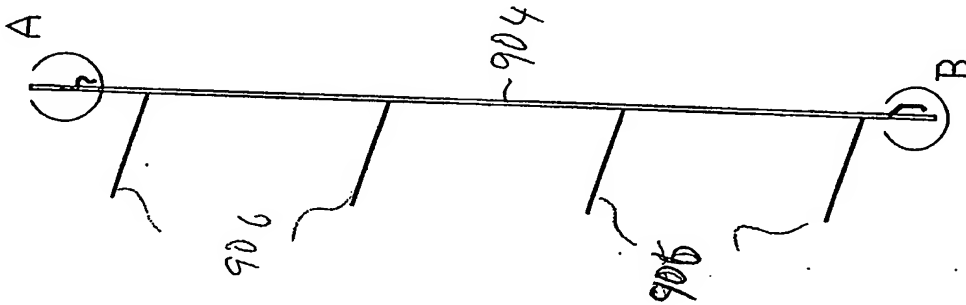
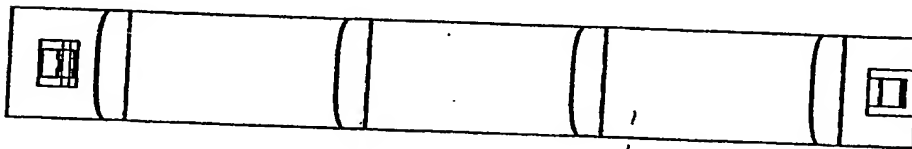
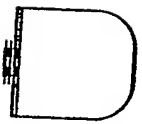
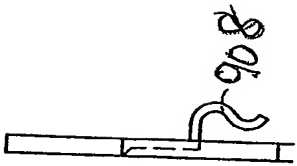
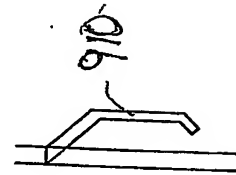


Fig 28B

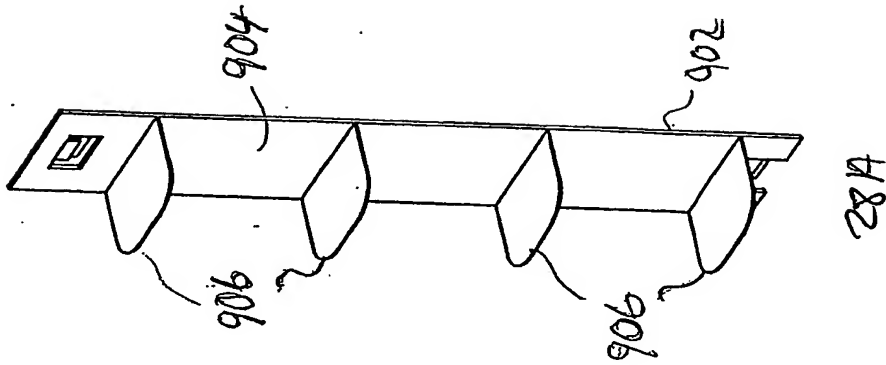
DETAIL B

28D



DETAIL A

28C



28A

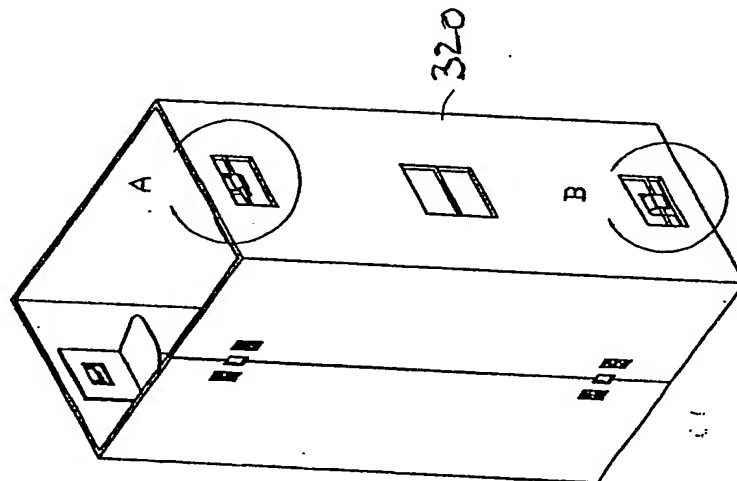
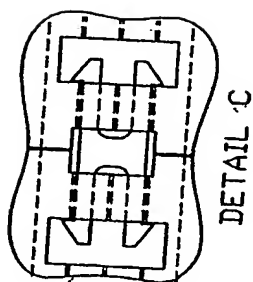
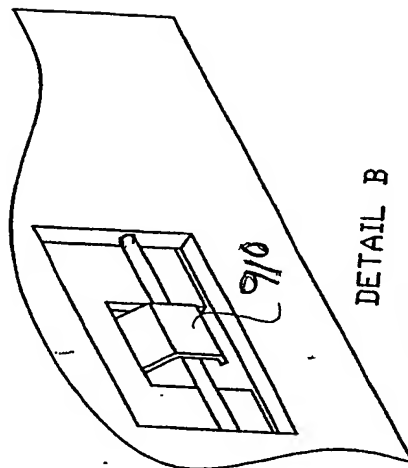
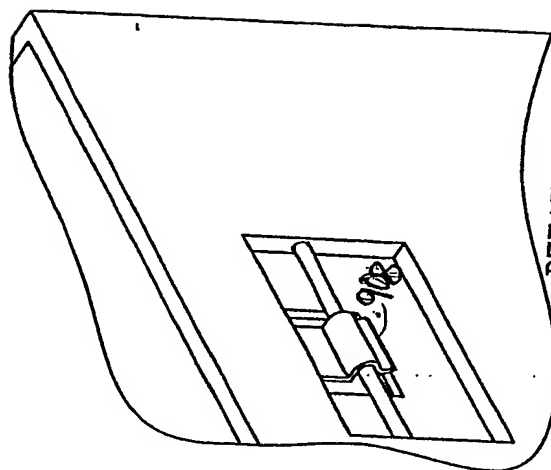
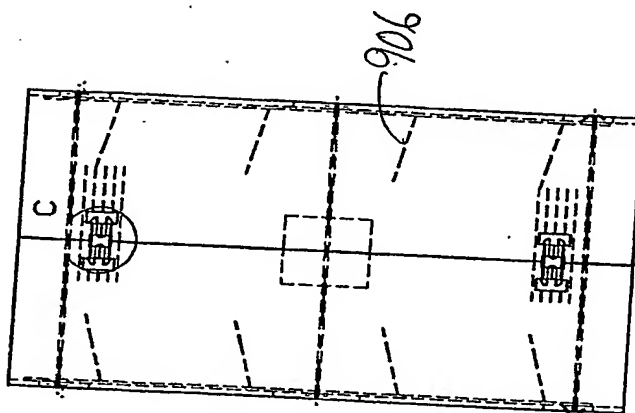
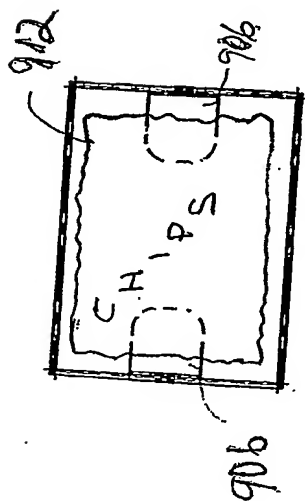


FIG. 29A



29B

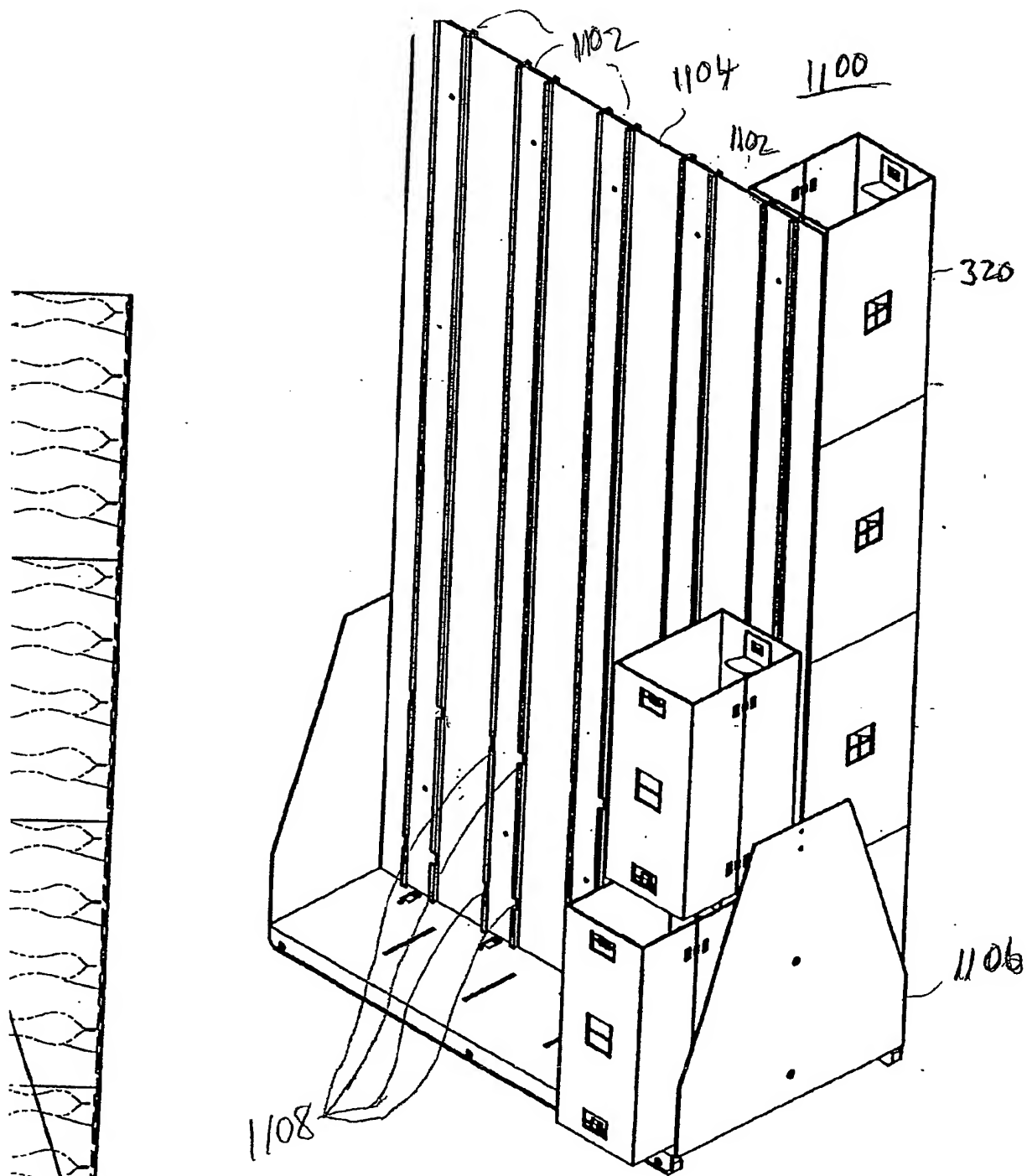


FIG. 30A

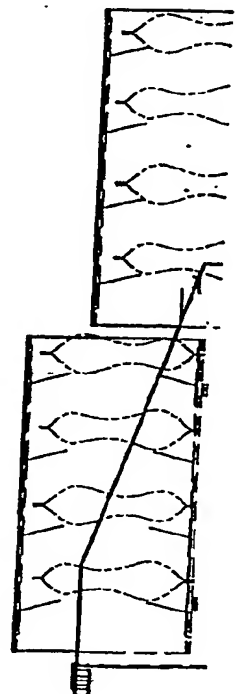
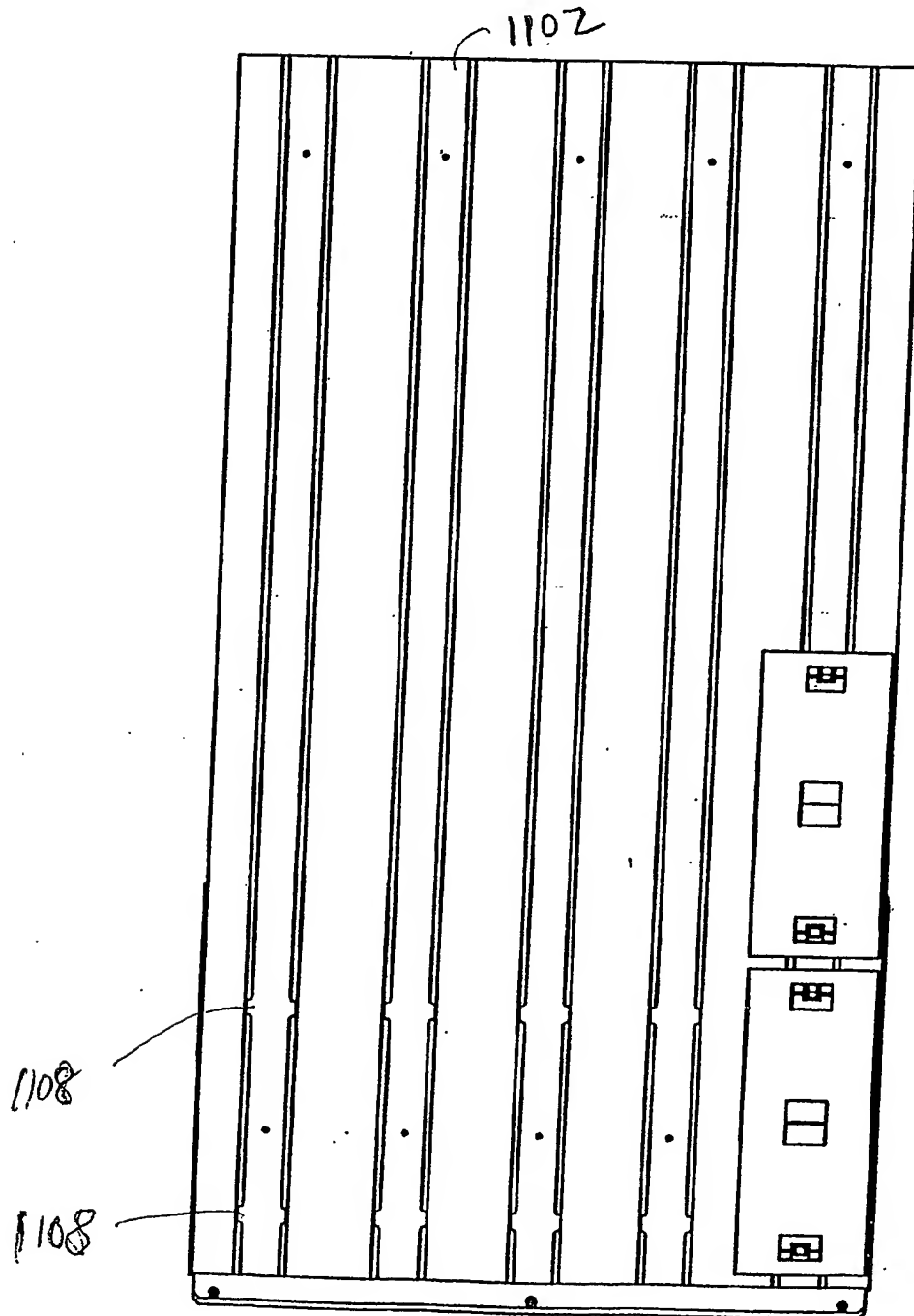
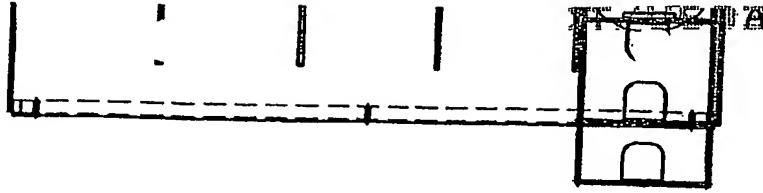
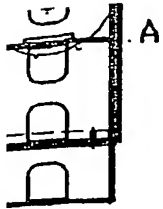


FIG 30B



VIEW A

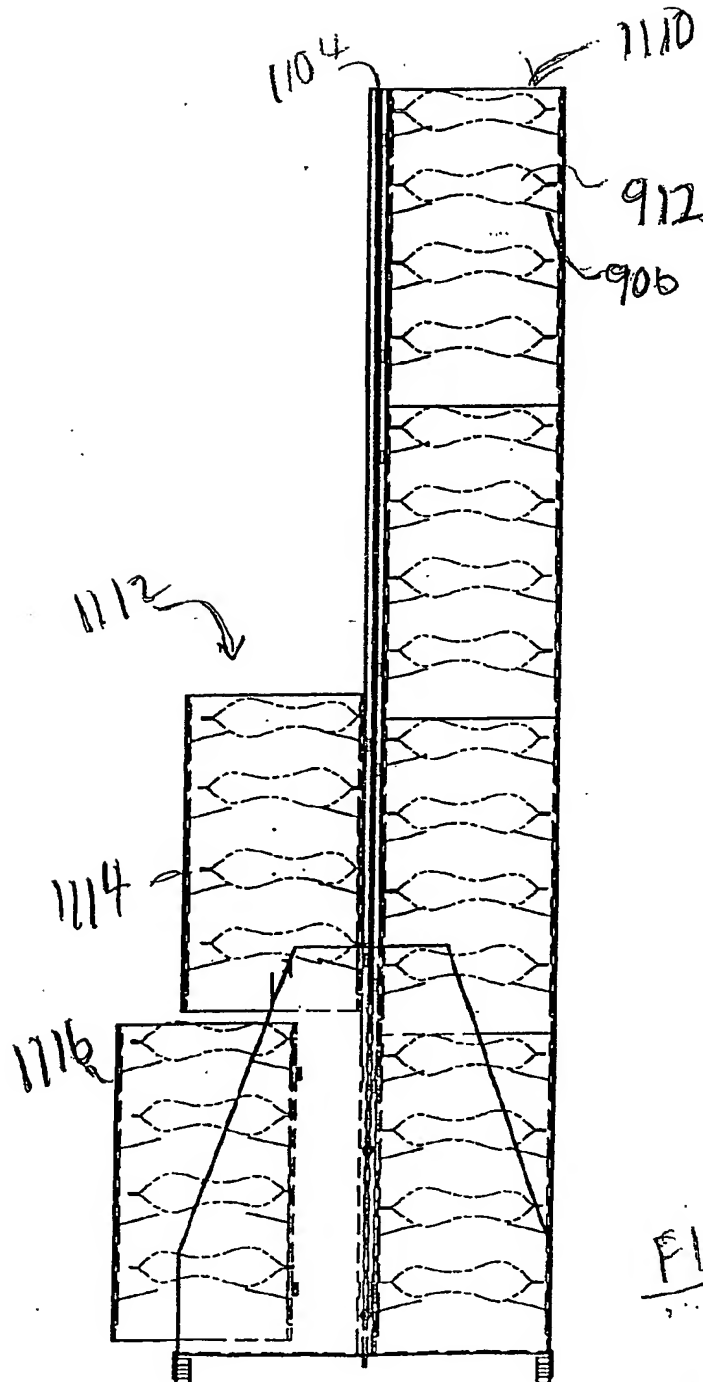
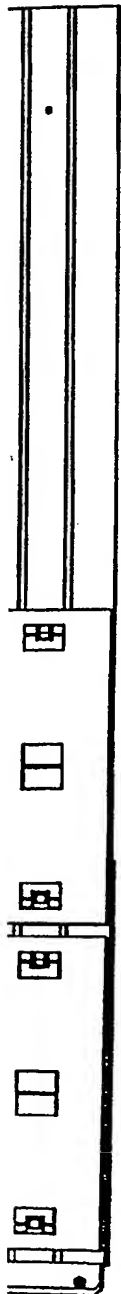
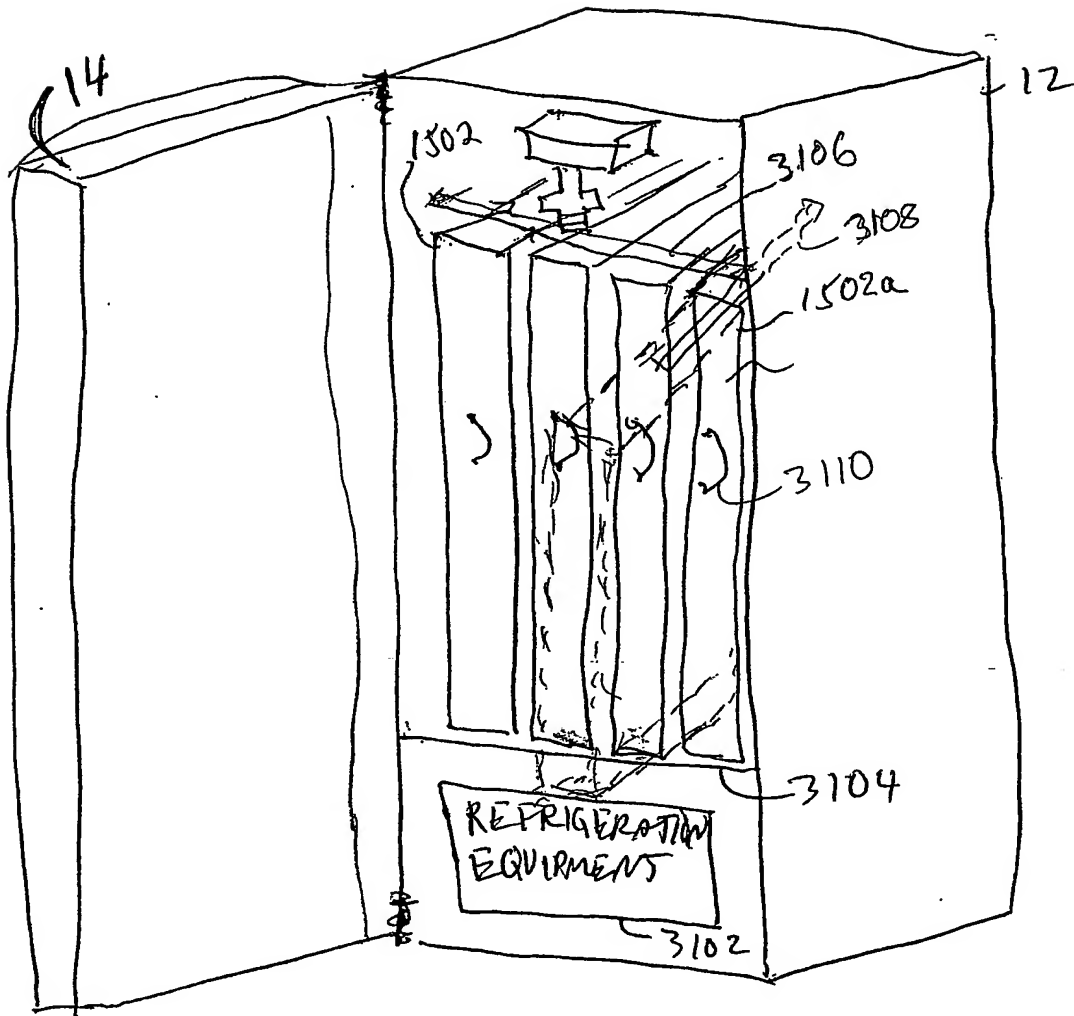


FIG 30C

FIG. 31

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/18888

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B65G 59/00

US CL : 221/123

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 221/123, 131, 133, 210; 312/42

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A, P	US 6,547,096 B1 (CHIRNOMAS) 15 April 2003 (15.04.2003)	
A	US 5,240,139 A (CHIRNOMAS) 31 August 1993 (31.08.1993)	

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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Date of the actual completion of the international search

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Authorized officer

David H Bollinger

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